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**DRAFT SUPPLEMENTAL
ENVIRONMENTAL IMPACT STATEMENT**

to the

**OGDEN RANGER DISTRICT
TRAVEL PLAN REVISION
SEPTEMBER 2007**

Box Elder, Cache, Morgan, Weber and Rich Counties, Utah

Lead Agency:

USDA Forest Service

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ABSTRACT:

This Draft Supplemental Environmental Impact Statement (DSEIS) presents additional analysis to supplement information presented in the Ogden Travel Plan Final Supplemental Environmental Impact Statement (FSEIS) particularly in the three deficiencies identified by the March 7, 2012 United States District Court for the District of Utah decision order. The Court held that the record of decision and FSEIS had these deficiencies: (1) It failed to provide notice of available support for the public to understand the information cataloguing illegal routes; (2) it failed to adequately support its assumptions about the impact of illegal user-created routes; and (3) it failed to explain explicitly its evaluation of the cumulative impacts of its decision on the Shoshone Trail system. As a result, the currently proposed supplement to the FEIS will be directed to address these deficiencies.

The FEIS documents the analysis of the same six alternatives that were considered in the Travel Plan for the Ogden Ranger District: Alternative 1 was designed primarily to consider the values inherent in inventoried roadless areas. Alternative 2 was designed to emphasize a variety of motorized recreation and access opportunities. Alternative 3 was designed to consider important aspects of wildlife habitat management. Alternative 3a is the preferred alternative in the Draft EIS that balances considerations in Alternatives 1 through 3, emphasizing wildlife habitat as in Alternative 3, but also providing for very important access needs to private lands and for administrative purposes. Alternative 4 is the “No Action” Alternative that would continue current management under the existing Ogden Travel Map. Alternative 5 was formulated from additional public comments and analysis.

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INTRODUCTION

Background

In July 2003, the Forest Service announced a proposal to update the Ogden Travel Plan, and on March 31, 2004, it published an official Notice of intent to prepare an environmental impact statement (“the Notice”) in the Federal Register. The Notice explained that increasing demand for motorized recreation necessitated the Travel Plan revision.

In December 2004, the Forest Service released the Ogden Ranger District Travel Plan Draft Environmental Impact Statement (“DEIS”), which was followed by a period of briefings, meetings, and field trips to gather comments from the public and interested local groups.

In a March 20, 2006 Record of Decision (ROD), District Ranger Chip Sibbernson decided to implement Alternative 5 for the Ogden Ranger District Travel Plan. Four appeals were received requesting a review of his decision at a higher administrative level. Following the review on June 30 2006, Forest Supervisor Faye Krueger reversed Ranger Sibbernson’s decision based on her finding that the environmental analysis was not adequate to support the decision in regard to cumulative effects analysis.

In response to Krueger’s decision, the Forest Service created a Draft Supplemental Environmental Impact Statement (“DSEIS”) which was issued on March 21, 2007. Following the public comment period, the Forest Service issued the Ogden Ranger District Travel Plan Revision Record of Decision and Final Supplemental Environmental Impact Statement (“ROD/FSEIS”). This ROD/FSEIS did not replace the ROD/FEIS entirely, but supplemented and replaced discrete sections of the ROD/FEIS.

This Record of Decision the FSEIS was signed on September 12, 2007. It was appealed but Supervisor Krueger approved the ROD/FSEIS. After the denial of their appeal, four local groups filing a Petition for Review of Agency Action and Complaint for Injunctive and Declaratory Relief with the United States District Court, District of Utah, Central Division on September 30, 2009.

Scope of the Draft Supplement

This Draft Supplemental Environmental Impact Statement (DSEIS) presents additional analysis to supplement information presented in the Ogden Travel Plan Final Supplemental Environmental Impact Statement (FSEIS) particularly in the three deficiencies identified by the March 7, 2012 United States District Court for the District of Utah decision order. The Court held that the record of decision and FSEIS had these deficiencies: (1) It failed to provide notice of available support for the public to understand the information cataloguing illegal routes; (2) it failed to adequately support its assumptions about the impact of illegal user-created routes; and (3) it failed to explain explicitly its evaluation of the cumulative impacts of its decision on the Shoshone Trail system. As a result, the currently proposed supplement to the FEIS will be directed to address these deficiencies.

A supplemental document (40 CFR 1502.9 (b) (3), FSH 1909.15 § 18) can provide additional clarification of the previous analysis. This Draft Supplemental Environmental Impact Statement (DSEIS) presents additional analysis to supplement information presented in the Travel Plan Final Environmental Impact Statement (FEIS), particularly in the disclosure of effects from Illegal routes.

This document does not replace the Travel Plan FEIS in entirety. Instead, information provided in the DSEIS will replace discrete sections of the FEIS or provide additional information to supplement the analysis presented in the FEIS. Some sections of this document refer to maps, appendices, or other information contained in the Ogden Travel Plan Revision FEIS.

The Ogden Travel Plan FEIS is available on the Uinta-Wasatch-Cache National Forest website (<http://www.fs.usda.gov/projects/uwcnf/landmanagement/projects>). To obtain a CD of the FEIS, contact Rick Vallejos by phone (801-625-5112).

Written comments will be accepted throughout the 45-day period. Comments can be hand delivered from 8:00 a.m. to 4:30 p.m., Monday through Friday, excluding federal holidays. Electronic comments must be submitted in a format such as an email message, rich text format (.rtf) or Word (.doc) to comments-intermtn-wasatch-cache-ogden@fs.fed.us by facsimile to (801) 253-8118, or to: Rick Vallejos, Ogden Ranger District, Uinta-Wasatch-Cache National Forest, 501 25th Street, Suite 103, Ogden, UT 84401.

It is important that reviewers provide their comments at such times and in such manner that they are useful to the agency's preparation of the environmental impact statement; therefore, comments should be provided prior to the close of the 45-day scoping period and should clearly articulate the reviewer's concerns and contentions. The scoping period begins when the Notice of Availability is published in the *Federal Register*.

Comments received in response to this solicitation, including names and addresses of those who comment, will be part of the public record for this proposed action. Comments submitted anonymously will be accepted and considered, however.

The following sections describe the purpose and need for action as well as the activities proposed to accomplish those needs. There has been no change in the purpose and need for action since the preparation of the FEIS. Corrections and clarification of information previously presented in chapters 1 through 4 follow this summary, followed by the supplemental analysis of effects.

Purpose and Need for Action

For more detail about the purpose and need for action, please see pages 1-2 Section 1.3.1 in the Ogden Travel Plan Revision FEIS.

Alternatives, Including the Proposed Action

This DSEIS documents supplemental analysis of the same six alternatives considered in the Ogden Travel Plan Revision FEIS. These alternatives are summarized below and described in detail in Chapter 2 of the Ogden Travel Plan Revision FEIS. Differences between the alternatives are summarized below.

Alternative 1

Alternative 1 is designed to divert motorized use away from inventoried roadless areas in order to preserve their integrity and to minimize motorized impacts on other resources including wildlife habitat, watershed protection and public appreciation of the forest. This alternative emphasizes the value and importance of maintaining roadless and non-motorized landscapes. It focuses on protecting inventoried roadless areas and concentrating motorized recreation in areas where this type of use is already occurring.

Alternative 2

In Alternative 2, travel route management proposals were based on providing additional and improved motorized recreation opportunities. This alternative has new routes proposed that would create loop trails using the existing system of roads. It also allows public use on routes that in the past were closed, open only for administrative use, or were not on the previous travel plan as an open route. This alternative responds to the public comment for additional motorized routes.

Alternative 3

Alternative 3 was created in response to the numerous comments from the scoping process on the negative effects of motorized recreation on wildlife populations and habitat. This alternative provides an array of road and motorized trail experiences while minimizing or reducing the effects to a broad range of wildlife species and their habitats. Alternative 3 concentrates motorized access in areas where these activities are presently occurring, while reducing existing routes or avoiding new trail and road construction in areas that are more isolated, have less disturbance, and provide generally higher quality wildlife habitat. This alternative also minimizes the creation of new roads and motorized trails within the forest carnivore habitat/corridor especially within the Curtis Creek and Monte Analysis areas.

Alternative 3a (DEIS Preferred)

This alternative is similar to and derived from Alternative 3, the wildlife emphasis alternative, but with some different actions on a limited number of routes. This difference is primarily due to administrative need or to emphasize another resource in specific areas. Substantial additional interdisciplinary analysis went into the development of this alternative considering tradeoffs between the various alternatives and there was considerable line officer input.

Alternative 4 (No Action)

Under Alternative 4, the existing 2004 Wasatch-Cache National Forest Travel map for the Ogden and Logan Ranger Districts would determine the status of most of the system of routes. Although there are other routes that exist and are being used by the public, the No Action alternative would aggressively manage routes limiting the transportation system to only those roads on the current Travel Plan map and any road used for administrative access.

Alternative 5 (Forest Service Selected)

Alternative 5 was developed by the Forest Service after public comments on the five alternatives described in the draft environmental Impact statement had been reviewed. The purpose was to improve resolution of issues raised in public comments. Most of the actions to roads and trails of the DEIS Preferred Alternative 3a were retained.

Table 1a. Comparison of proposed treatments for alternatives 1, 2, 3, 3a, 4 and 5.

	Alternative 1	Alternative 2	Alternative 3	Alternative 3a	Alternative 4	Alternative 5 (Selected Alternative)
Route Status	Miles	Miles	Miles	Miles	Miles	Miles
Open Road*	187	206	202	208	198	202
Closed Route*	56	48	56	50	66	50
Motorized Trail*	39	61	35	49	46	58
Non-Motorized Trails*	141	107	128	116	110	113
Unauthorized routes*	97	97	97	97	97	97
Total**	520	519	518	520	517	520
Miles of Open roads and Motorized Trails	226	267	237	256	244	260
Miles of Seasonal Closures	1	8	5	11	7	13
Miles of Administrative Closures	53	49	61	57	51	60
Miles open without any closures	171	210	171	189	185	187
Miles of new Open Motorized trails	34	29	10	13	0.00	18
Miles of Unauthorized Routes found in updated analysis to be reclaimed***	97	97	97	97	97	97
Number of New Gates	11	10	11	9	0	15
Number of Relocated Gates	1	2	1	2	0	2
Significant Issues to which Alternatives Respond	Alternative Emphasis	Alternative Emphasis	Alternative Emphasis	Alternative Emphasis	Alternative Emphasis	Alternative Emphasis
Motorized activities negatively affect wildlife habitat	Moderate protection of wildlife habitat.	Least protection of wildlife habitat.	Best protection of a range of wildlife habitats.	Good protection of wildlife habitat.	Moderate protection of wildlife habitat.	Good protection of wildlife habitat.
Motorized activities negatively affect regional wildlife corridor	Good protection of wildlife corridor.	Least protection of wildlife corridor.	Best protection of wildlife corridor.	Good protection of wildlife corridor.	Good protection of wildlife corridor.	Good protection of wildlife corridor.
Negative effects to roadless areas	Best protection of roadless areas values.	Least protection of roadless areas values.	Good protection of roadless areas values.	Good protection of roadless areas values.	Good protection of roadless areas values.	Good protection of roadless areas values.
Inadequate range of trail-based recreation opportunities	Good range of motorized trails opportunities.	Best range of motorized trails opportunities.	Least range of motorized trails opportunities.	Good range of motorized trails opportunities.	Moderate range of motorized trails opportunities.	Good range of motorized trails opportunities.

*Open Road: Roads open to motorized use, seasonally closed, administrative use only, county and state jurisdiction; Closed route: system routes already closed or will be closed to public use and will be removed from the road management system; Motorized trails: existing and new proposed trails open to motorcycles or ATVs; Unauthorized routes: routes created by users or previous land owners which will not be managed as part of the Forest Service transportation system.

**Approximate mileage within plus or minus one mile.

***Unauthorized routes digitized from 2010 (9.84 inch) high resolution orthophotography. This method of identifying routes on National Forest is the preferred method because of the higher level of accuracy. Miles of Unauthorized routes do not change by Alternative because the new inventory used the 2007 data files which identified routes proposed to be included or changed to other route categories.

Chapter 1 Purpose and Need

Add the following section “1.3.2.5 Code of Federal Regulations” on page 1-10 10 in the Ogden Travel Plan FEIS.

New Criteria for designation of roads, trails, and areas has been provided on a national level to aid the Ranger Districts in minimizing environmental impacts caused by motorized recreation activities.

§ 212.55 Criteria for designation of roads, trails, and areas.

- (a) General criteria for designation of National Forest System roads, National Forest System trails, and areas on National Forest System lands. In designating National Forest System roads, National Forest System trails, and areas on National Forest System lands for motor vehicle use, the responsible official shall consider effects on National Forest System natural and cultural resources, public safety, provision of recreational opportunities, access needs, conflicts among uses of National Forest System lands, the need for maintenance and administration of roads, trails, and areas that would arise if the uses under consideration are designated; and the availability of resources for that maintenance and administration.
- (b) Specific criteria for designation of trails and areas. In addition to the criteria in paragraph (a) of this section, in designating National Forest System trails and areas on National Forest System lands, the responsible official shall consider effects on the following, with the objective of minimizing:
 - (1) Damage to soil, watershed, vegetation, and other forest resources;
 - (2) Harassment of wildlife and significant disruption of wildlife habitats;
 - (3) Conflicts between motor vehicle use and existing or proposed recreational uses of National Forest System lands or neighboring Federal lands; and
 - (4) Conflicts among different classes of motor vehicle uses of National Forest System lands or neighboring Federal lands.
 In addition, the responsible official shall consider:
 - (5) Compatibility of motor vehicle use with existing conditions in populated areas, taking into account sound, emissions, and other factors.
- (c) Specific criteria for designation of roads. In addition to the criteria in paragraph (a) of this section, in designating National Forest System roads, the responsible official shall consider:
 - (1) Speed, volume, composition, and distribution of traffic on roads; and
 - (2) Compatibility of vehicle class with road geometry and road surfacing.
- (d) Rights of access. In making designations pursuant to this subpart, the responsible official shall recognize:
 - (1) Valid existing rights; and
 - (2) The rights of use of National Forest System roads and National Forest System trails under § 212.6(b).
- (e) Wilderness areas and primitive areas. National Forest System roads, National Forest System trails, and areas on National Forest System lands in wilderness areas or primitive areas shall not be designated for motor vehicle use pursuant to this section, unless, in the case of wilderness areas, motor vehicle use is authorized by the applicable enabling legislation for those areas.

Add these items to Table 1.6.2 Public Comments Not Addressed in this Analysis on page 1-1 and 2 of the Ogden Travel Plan FSEIS with the following table.

Table 1.6.2 Public Comments Not Considered Significant Issues

Public Comment	Disposition
The FEIS failed to provide notice of available support for the public to understand the information cataloging illegal routes	The FEIS and SEIS did not disclose the location and inventory of the routes designated as Unauthorized Route. This would include user-created illegal routes. This Draft Supplemental Environmental Impact Statement will disclose the 2012 Unauthorized routes inventory digitized from 2010 (9.84 inch) high resolution orthophotography and

	statistically field reviewed during the summer of 2012. This disclosure will be in the form of GIS maps for each Analysis Area.
The FEIS failed to adequately support its assumptions about the impact of illegal user-created routes;	The documentation of the unauthorized routes in the FEIS and SEIS assumed that no environmental impacts would occur because all routes would be closed and obliterated. This assumption did not take into consideration the difficulty and success of the Forest Service completely removing user-created routes. This Draft Supplemental Environmental Impact Statement will disclose effects by alternatives to each of the resources.
The FEIS failed to explain explicitly its evaluation of the cumulative impacts of its decision on the Shoshone Trail system	Additional explanation of the cumulative impacts caused by the Shoshone ATV Trail is included in this Draft Supplemental Environmental Impact Statement. This latest disclosure of effects will update the current management status of the motorized trail by the Ogden Ranger District.

Chapter 2 Alternatives

Add the following to section “2.4 Alternatives Considered in Detail” on page 2-3 10 in the Ogden Travel Plan FEIS.

The additional information on the inventory of unauthorized routes collected from 2010 (9.84 inch) high resolution orthophotography was carefully studied and reviewed to determine changes to the FEIS alternatives. Each route was reviewed by Ranger District staff to determine if the route would be added or subtracted from the existing Alternatives considered in the FEIS.

None of the routes reviewed were determined to meet the Purpose and Need in section 1.3.1 in the FEIS which described the effort to carefully consider what should be included in the Ogden RD transportation system. Routes to be added should provide quality motorized recreation opportunities, better manage increased demand, provide reliable admin access and reduce environmental damage.

The original Alternatives included 18 miles of new routes to be added as motorized trails that included unauthorized travel routes created by the public but were acceptable based on the above criteria. This amount will not change as a result of this supplemental information.

Replace the following table in Section 2.7.1 on pages 2-12 and 2-13 of the Ogden Travel Plan FEIS. This updates the miles of unauthorized routes for the analysis. This new inventory of the unauthorized routes was digitized from 2010 (9.84 inch) high resolution orthophotography.

Table 2.7.1 provides a summary of some of the main differences between the alternatives, showing differing miles of routes for each and how the alternatives were designed to try to address significant issues. The differences and effects listed below are described in more detail in Chapter 4.

Table 2.7.1 Comparison of Alternatives

	Alternative 1	Alternative 2	Alternative 3	Alternative 3a	Alternative 4	Alternative 5 (Selected Alternative)
Route Status	Miles	Miles	Miles	Miles	Miles	Miles
Open Road*	187	206	202	208	198	202
Closed Route*	56	48	56	50	66	50
Motorized Trail*	39	61	35	49	46	58
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Miles of new Open Motorized trails	34	29	10	13	0.00	18
Miles of Unauthorized Routes found in updated analysis to be reclaimed***	97	97	97	97	97	97
Number of New Gates	11	10	11	9	0	15
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Significant Issues to which Alternatives Respond	Alternative Emphasis	Alternative Emphasis	Alternative Emphasis	Alternative Emphasis	Alternative Emphasis	Alternative Emphasis
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Motorized activities negatively affect regional wildlife corridor	Good protection of wildlife corridor.	Least protection of wildlife corridor.	Best protection of wildlife corridor.	Good protection of wildlife corridor.	Good protection of wildlife corridor.	Good protection of wildlife corridor.
Negative effects to roadless areas	Best protection of roadless areas values.	Least protection of roadless areas values.	Good protection of roadless areas values.	Good protection of roadless areas values.	Good protection of roadless areas values.	Good protection of roadless areas values.
Inadequate range of trail-based recreation opportunities	Good range of motorized trails opportunities.	Best range of motorized trails opportunities.	Least range of motorized trails opportunities.	Good range of motorized trails opportunities.	Moderate range of motorized trails opportunities.	Good range of motorized trails opportunities.

*Open Road: Roads open to motorized use, seasonally closed, administrative use only, county and state jurisdiction; Closed route: system routes already closed or will be closed to public use and will be removed from the road management system; Motorized trails: existing and new proposed trails open to motorcycles or ATVs; Unauthorized routes: routes created by users or previous land owners which will not be managed as part of the Forest Service transportation system.

**Approximate mileage within plus or minus one mile.

***Unauthorized routes digitized from 2010 (9.84 inch) high resolution orthophotography. This method of identifying routes on National Forest is the preferred method because of the higher level of accuracy. Miles of Unauthorized routes do not change by Alternative because the new inventory used the 2007 data files which identified routes proposed to be included or changed to other route categories.

Add the following to section “2.5.16 History and Status of the Shoshone ATV Trail” on page 2-10 in the Ogden Travel Plan FEIS and page 2.1 in the SEIS.

Since the Final Decision in September 2007, the amount of recreation use on those routes included in the Shoshone ATV trail on the Ogden Ranger District have not noticeably increased or decreased. No new signs have been installed on the route specifically for the Shoshone Trail name. The unofficial parking areas have not changed in size in any way.

The junction of the Curtis Ridge Road #20059 and State Highway 39 is a major starting point for ATV and UTV use on the Shoshone system of routes. It is easier to unofficially monitor the current activities on the routes from motorized vehicles since most ATVs and UTVs are unloaded from their trailers at this point. Even on peak holiday weekends, this road junction does not become overcrowded and parked vehicles don’t spill into adjacent open areas.

The Ogden Ranger District has not needed to increase its Travel Management patrols or direct management of motorized recreation because of an increased draw caused by the Shoshone ATV trail.

There has not been any Special Use Permits issued for ATV group events or organized rides on the Ogden Ranger District. This includes and specifically illustrates the lack of attention from the general public on the Shoshone ATV trail.

At the Ogden Ranger District main office in downtown Ogden, Utah, visitors are given maps of the Shoshone ATV trail if motorized recreation is their topic of interest. At this time, we still have a number of boxes of the Shoshone ATV trail map printed by the State of Utah Division of Parks and Recreation. It is unknown that this map will be reprinted once they are gone.

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Chapter 3 The Affected Environment

Add the following paragraphs on page 3-2 of the Ogden Travel Plan FEIS under the heading of 3.1.1 Travel Planning on the Ogden Ranger District.

- A Motor Vehicle Use map following the new national format was printed for the Ogden Ranger District in spring of 2008. The system of open routes was based on the 2007 FEIS decision.
- The Motor Vehicle Use map was reprinted in 2009 and 2012 with no changes.

On March 31, 2004, a Notice of Intent was published announcing the district's intention to prepare the EIS for the Ogden Travel Plan. The ROD was signed in 2006. It provided for management of summer-season, including types of vehicles that could be used on specific routes, seasonal restrictions on specific routes and routes that are open only for "administrative use" (law enforcement, infrastructure maintenance, permittee access, and fire protection).

Four appeals were filed. On June 30, 2006, Forest Supervisor Faye Krueger reversed the March 2006 decision because she found that the cumulative effects analysis was inadequate.

A NOI announcing the preparation of a supplement to the EIS was published on July 24, 2006 and a draft SEIS was released for comment on April 20, 2007. A ROD was signed by District Ranger Sibbernson on September 12, 2007. Three appeals were received on the SEIS. On December 17, 2007, Forest Supervisor Faye Krueger affirmed the 2007 decision.

On September 30, 2009, four groups (Sierra Club, Wild Utah Project, Western Wildlife Conservancy, and Citizens' Committee to Save Our Canyons) appealed this decision, alleging that it violated the National Environmental Policy Act ("NEPA"). They filed a Petition for Review of Agency Action and Complaint for Injunctive and Declaratory Relief.

On March 7, 2012, United States District Judge Clark Waddoups remanded the 2007 Decision to the Forest Service for additional documentation and analysis. The status quo as of this date shall be maintained until such time as the EIS is amended to address the court order.

Add the following paragraphs on page 3-4 of the Ogden Travel Plan FEIS under the heading of 3.2 Transportation System 3.2.2 Existing Condition.

Unauthorized Routes

The United States District Court order directed additional inventory and analysis of the impact of illegal user-created routes. In response to this order, the Forest Service initiated an inventory of unauthorized routes using the following methods.

Aerial imagery of the five Analysis Areas used in the Ogden Travel Plan was overlaid with a feature class consisting of a series of approximately 34,500 five-acre grid cells. Existing lines—including authorized roads and trails, unclassified roads from the 2007 environmental impact statement, and National Hydrography Dataset information, etc.—were added as well. Each five-acre grid cell was examined to see if it contained any possible unauthorized routes, trails, or other linear features that could be used by motorized vehicles but which were not already captured by an existing line feature class in GIS.

If a grid cell did not appear to contain any additional linear features that were not accounted for by existing lines, the corresponding column/cell in the attribute table of the feature class was assigned a value of "0." If a grid cell appeared to contain a line that had the potential to be an unrecorded user-created route, or that could be used for access by a motorized vehicle, the corresponding column/cell was assigned a value of "1."

Actual digitizing of potential new routes was completed at the Remote Sensing Application Center. Grid cells that had been assigned a value of 1—that is, grid cells that contained linear features that had been unaccounted for in the existing line features—were examined more closely. Most of these grid cells did contain features that were then digitized. However, after this secondary review, a small percentage of grid cells that initially had been assigned a value of 1 were found not to contain a possible trail that was 48-inches or wider, which was the threshold width for inclusion. Therefore, no lines were digitized in these grid cells.

Likewise, secondary review also identified a small number of areas that initially had been assigned a value of 0 but that actually contained linear features that appeared to meet the 48-inch criteria for inclusion. These linear features were digitized.

In addition to the obvious two-track routes that were digitized, linear features such as fence rows, short stream reaches, and utility corridors were digitized if it seemed that motorized use was evident, or in some cases if access to the linear feature could be made easily from existing routes.

This inventory identified 1123 separate unauthorized or unmapped features for a total of 210.76 miles.

A statistical sampling of the features was completed during the summer of 2012 by Ranger District personnel. The purpose, methodology, and results of the individual surveys are presented below. These include closed road survey, unidentifiable travel feature inventory, random routes field survey, and random perennial stream crossings field survey.

Summary of Results – The Unidentifiable Travel Feature Inventory (UTF) inventory resulted in 1,123 UTF segments delineated in GIS. A survey of 30 random UTFs indicates that about 60% of the UTFs were full size vehicle routes or ATV trails of which most were full size vehicle routes. The use on the full size vehicle routes (4X4≥60”) were mostly full size vehicles with some ATV use, stock, and wildlife use. The remaining routes were stock or wildlife trails or hiking trails.

The closed road survey showed that about half of the roads are effectively closed. For roads that were not effectively closed, the use on these roads is mostly medium to frequent. For all of the roads that were effectively closed, most of the routes had low vegetative recovery, very little to no erosion, and no impacts to perennial streams. One road had extensive erosion due to poor drainage from the road because the road is incised for much of its length.

A conclusion from the closed roads survey is roads are difficult to close. When alternative travel routes are not close by, when the land is open and relatively level, and/or when roads are closed only at the beginning of the route and the route is not obliterated or brought back to contour, motorized vehicles will find a way to explore that road.

No closed roads were identified in GIS that crossed perennial stream channels.

The random sample of 20 UTF routes that crossed perennial stream were field checked. The results show almost 60 percent of the routes that cross perennial streams were trails for stock or wildlife. Eight crossings had erosion present and the severity of erosion was low or historic. Of the eight that had erosion, five had sediment entering the water and these occurred on a decommissioned road, a decommissioned trail, a full size vehicle route, a horse and cattle trail, and a ski area maintenance road. There does not appear to be a pattern of the type of use on the route with the amount of erosion or sedimentation. With the low amount of erosion from the roads, a low amount of sedimentation of the stream is expected.

Unidentifiable Travel Feature Inventory (UTF) Routes Random Sample Field Survey

Purpose of the Inventory – The purpose was to provide a comprehensive, current inventory of unidentifiable user features on the Ogden Ranger District and determine the accuracy of the inventory.

Method of Inventory – Unidentifiable travel features (UTFs) are linear features identified from aerial photos that have the appearance of being a road or ATV trail and these are delineated in a geographical information system (GIS). Using the UTF inventory, a random sample of thirty UTFs was selected for field verification and on the ground conditions.

Results of Inventory – After the UTF layer was delineated it was compared to the roads GIS layer that was used in the 2007 Ogden Travel Plan SFEIS to determine which UTFs do or do not correspond to both data sets. The UTFs were very close to the location of the roads GIS layer that was used in the 2007 Ogden Travel Plan SFEIS. No changes were made to the locations of the roads in the GIS layer that was used in the 2007 Ogden Travel Plan SFEIS.

For UTFs that did not correspond to the GIS road layer used in the 2007 Ogden Travel Plan SFEIS, the UTFs were delineated in a separate GIS layer (called the UTF Inventory) and there were 1,123 UTF delineated in this GIS layer. Of the UTFs that were delineated, the longest was 3.1 miles, the average length was 0.19 miles, 90 percent of them were less than 0.41 miles, and 50 percent of them were less than 0.11 miles. Most UTFs were short spurs from existing open roads.

As a comparison, in 2010-11, a UTF inventory was conducted on the Logan Ranger District and almost all of the UTFs were field checked. The results of this survey indicated that about 70% of the UTFs were a road or trail. The random sample of 30 UTFs on the Ogden Ranger District had about 65% of the UTFs verified as roads or ATV trails which is similar to the results of the Logan RD field surveys.

A summary of field data collected from the random sample is presented in Table 3.2.2. Of the 30 random UTFs, four were not reviewed in the field because they had difficult access. The field survey of the remaining 26 UTFs showed that:

- 13 were full size vehicle routes (4X4≥60")
- 8 were cattle, sheep or deer trails
- 1 was an ATV trail
- 1 was a two-track route with no visible motor vehicle use
- 2 were hiking trails, and
- 1 was located on private land.

The current use for the UTFs that were identified as full size vehicle routes (4X4≥60") indicates that:

- 8 routes had full size vehicles use
- 2 routes had ATV use
- 1 route had cattle/sheep trail/deer trail use
- 1 route had horse use, and
- 1 route had other uses that were not able to be identified.

Bare soil on the road and sediment and erosion were associated only with full size vehicle and ATV routes.

Table 3.2.2. Summary of Unidentifiable Travel Features (UTF) from Random Sample

Object ID_1	Confidence	Trail Width	Current Uses	Use Level	Surface Type and Construction	Sediment/Erosion	Gully Erosion (Ft)	Comments
1	High	4X4≥60"	4x4 wheelbase ≥ 51"	High	>40% Bare Soil, Constructed	Yes	70	Many OHV routes
2	High	4X4≥60"	ATVs wheelbase ≤ 50"	High	>40% Bare Soil	Yes	60	Fresh ATV tracks
4	High	4X4≥60"	4x4 wheelbase ≥ 51"	Low	>60%mixed vegetation and rock		20	Evidence of some motor vehicle use
5	High	4X4≥60"	4x4 wheelbase ≥ 51"	High	>40% Bare Soil			Campsite
12	Low	Two track	ATVs wheelbase ≤ 50"	Low	>60%mixed vegetation and rock			
13	High	4X4≥60"	4x4 wheelbase ≥ 51"	High	>40% Bare Soil, Constructed			Accesses dispersed camp site
14	Low	4X4≥60"	4x4 wheelbase ≥ 51"	Low	>40% Bare Soil			
16	Low	4X4≥60"	4x4 wheelbase ≥ 51"	Low	>40% Bare Soil			Camp location
26	High	4X4≥60"	4x4 wheelbase ≥ 51"	High	>40% Bare Soil, Constructed	Yes		Service
27	High	4X4≥60"	4x4 wheelbase ≥ 51"	Low	>60%mixed vegetation and rock	Yes	100	
30	Low	4X4≥60"	ATVs wheelbase ≤ 50"	High	>40% Bare Soil	Yes	70	Joann spring
3	Low	Other	cattle/sheep trail/deer trail	Low	>60%mixed vegetation and rock			Fence line
7	Low		cattle/sheep trail/deer trail	Low	>60%mixed vegetation and rock		0	No visible motor vehicle tracks
8	Low		cattle/sheep trail/deer trail	Historic	>60% vegetation, Constructed			Timber sale area, historic
9	Low	Other	cattle/sheep trail/deer trail					
15	Low	Other	cattle/sheep trail/deer trail	Low	>60%mixed vegetation and rock			Elk trail
19	Low		cattle/sheep trail/deer trail					No trail, game?
20	Low	4X4≥60"	cattle/sheep trail/deer trail	Historic	>60% vegetation, Constructed			Rehabilitated road
28	Low	One track	cattle/sheep trail/deer trail	Low	>60%mixed vegetation and rock		0	Cattle trail
29	Low	One track	cattle/sheep trail/deer trail	Historic	>60%mixed vegetation and rock			
11	Low	4X4≥60"	Horse		>60%mixed vegetation and rock, Constructed	Yes	2	
17	Low	4X4≥60"	Other	Low	>60%mixed vegetation and rock	Yes	16	Trees down over route
18	Low	Two track		Historic	>60% vegetation			No visible motor vehicle use
23	Low		Hikers		>60% vegetation			Hiking
24	High		Hikers					Hiking
6	High	No field survey - difficult access						
10	Low	No field survey - difficult access						
21	Low	No field survey - difficult access						
22	Low	No field survey - difficult access						
25	High	Two track	4x4 wheelbase ≥ 51"	Low	>40% Bare Soil, Constructed	Yes	300	Not FS

One further data review of the new UTF inventory was completed. Staff from the Ranger District reviewed every UTF segment using computer generated maps and air photos to best determine what created the feature, in particular, which were created by human activities including unauthorized motorized use. This review determined that many of the routes were of

a natural explanation but, approximately 97.09 miles of the routes were unauthorized motorized recreation travel routes. Each route was given an attribute name.

The following table summarizes the categorization of the UTF routes.

Table 4.2.2 Unidentifiable Travel Feature Inventory (UTF) segments categories

UTF attribute	Total Miles	Description
Ski trail	3.41	Cleared winter trails at Snowbasin
Dispersed	6.24	Motorized travel routes used as access to dispersed camping. Less than 150 feet from the system road.
Fenceline	27.07	Feature known as an existing fence
Hiking	17.05	System trail used for non-motorized use or motorcycle only (Skyline trail)
Not a route	27.68	UTF that were not used by motorized travel or utility corridors. Often identified as cattle or wildlife trails.
Private	14.53	UTF on private property. Many were caused by motorized travel routes.
Service	7.23	Waterline, phone or power lines portion of routes or access to utility lines outside of the utility corridor or water developments
Utility	10.46	Waterline, gas, phone or power lines
Travel route	97.09	Unauthorized motorized travel routes

We considered the fact that some of these attributes could be added to the unauthorized motorized recreation category, such as a fenceline, a winter ski trail cleared of trees, or a utility corridor, but the review of each UTF segment by the District Staff took that possibility into consideration. The goal was to determine the segments to be analyzed to determine the effects caused by motorized recreation. The 97.09 miles determined to be unauthorized motorized travel routes was used for this analysis.

Replace the following introduction and Table 3.7.2 on page 3-37 of the FEIS in section 3.7.4.

Table 3.7.2 displays the results of the most recent inventory of trails and open roads on the Ogden District. This includes private, county, city, state, and Forest Service routes including those implemented based on the 2007 Ogden Ranger District Travel Plan Record of Decision prior to the court action.

Table 3.7.2 Miles of Roads and Trails within the Boundary of the Ogden Ranger District

Analysis Area	Miles of Road	Miles of Non-motorized Trails	Miles of Motorized Trail
Curtis Creek	80	30	15
Monte Cristo and Wheat Grass	50	41	7
South Fork	9	3	0
Ogden Front & Pineview	32	33	17
Willard and Public Grove	24	10	29
Totals	195	117	68

Replace Table 3.10.2 on page 3-43 of the FEIS in section 3.10.3.**Table 3.10.2** Current Roads and Trails as they relate to Roadless Areas on the Ogden RD

Roadless Area Name	Degree to which Road Cherry Stems negatively affect area integrity	Miles of Motorized Trails	Miles of Non-Motorized Trails	Miles of Unauthorized Routes	Miles of Trails and Routes per square mile	Total Miles of Trails and Routes
Mollens Hollow	Area is moderately affected by cherry stems	5.03	11.92	2.92	0.72	19.99
Rock Creek – Green Fork	Small area is heavily affected by 2 long cherry stems	0	1.04	1.9	0.34	2.94
Sugar Pine	Small area is moderately to heavily affected by 3 cherry stems	0	4.69	2.75	0.85	7.44
Upper South Fork	Area has very minor effects from 2 short cherry stems	0	23.14	2.97	0.97	26.11
Willard	Heavy affects by long cherry stem on north side	12.6	7.64	3.85	0.81	24.09
Lewis Peak	Area has only very minor intrusion from 1 cherry stem	12.05	3.52	2.94	0.91	18.51
Burch Creek	Area not affected by any cherry stems	0	9.32	0.36	0.90	9.68
Totals		29.68	61.27	17.69		108.76

* Cherry stems are defined in the Glossary.

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Chapter 4 The Environmental Effects

4.1 Introduction

This chapter of the Ogden Travel Plan Draft Supplemental Environmental Impact Statement (DSEIS) presents analysis to correct and improve information presented in Chapter 4 of the Ogden Travel Plan Final EIS (USDA Forest Service, 2006), particularly in the disclosure of cumulative effects.

This chapter does not replace Chapter 4 of the Ogden Travel Plan FEIS in entirety. Instead, information provided in this chapter will replace discrete sections of the FEIS or is an addition. Some sections of this document refer to maps, appendices, or other information contained in the Ogden Travel Plan FEIS (USDA Forest Service, March 2006).

The information in this chapter is a summary of project-specific reports, assessments, and input prepared by Forest Service specialists, which are incorporated by reference in this draft supplemental environmental impact statement (DSEIS). These reports or memoranda are part of the project record on file at the Ogden Ranger District.

Replace table 4.1 Miles of Routes by Alternative (From GIS) on page 4-1 of the Ogden Travel Plan FEIS.

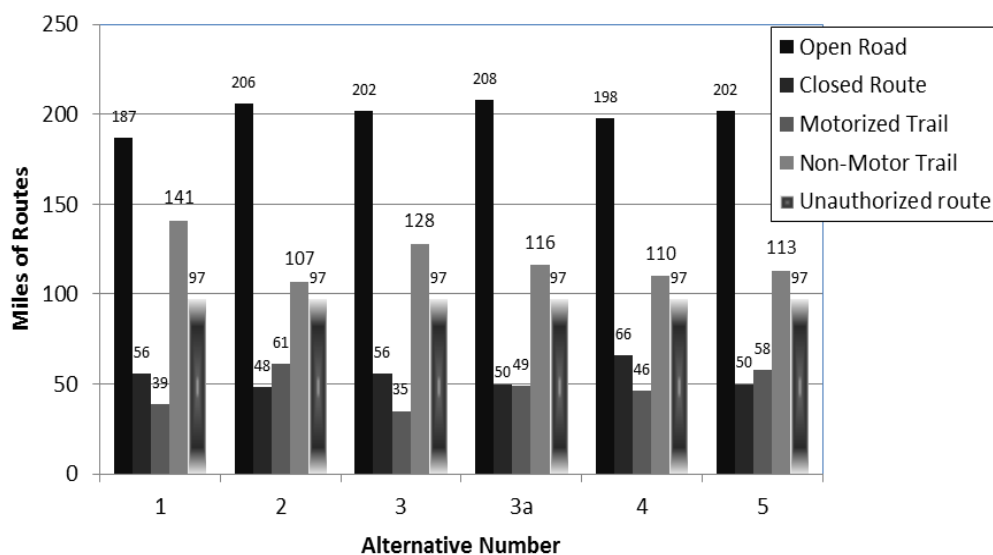


Figure 4.1 Miles of Routes by Alternative (From GIS).

Replace the definition of Unauthorized Routes in section 4.2.3 Effects Analysis Methods and Assumptions

Unauthorized Route: User created route that is not a part of the official system of roads or trails. Unauthorized routes digitized from 2010 (9.84 inch) high resolution orthophotography.

Add the following to section “4.3 Effects on Watersheds and Aquatic Resource” on page 4-3 to 4-11 in the Ogden Travel Plan FEIS.

4.3 Effects on Watersheds and Aquatic Resource

4.3.5.1 Effects Common to all Alternatives

The method of analysis is to assess the effects to sensitive water resources of the illegal routes currently on the Ogden District and determine the potential effect to sensitive water resources of illegal ATV route creation based on the disposition of the routes analyzed under each alternative. Information to determine where sensitive water features are located was from review of topography maps, aerial photography, and water rights database. Sensitive water resources are those that have perennial springs and wetlands that are greater than one acre or that support threatened, endangered or sensitive species and main perennial streams. The assessment of whether illegal routes will increase is based on where:

- topography such as relatively flat open terrain is conducive to ATV trail creation
- vegetation that is conducive to ATV use
- scenic viewpoints, stock ponds and other natural features occur that are desirable destinations for ATVs

Sensitive water resources on the Ogden Ranger District that have high probability of access based on slope and vegetation cover and the road or trail where access would occur are shown in Table 1. Table 2.7.2 Summary of Proposed Activities by Alternative in the 2006 Ogden Travel Plan FEIS presents alternatives that show the relative changes to the 2006 existing travel system of the Ogden Ranger District and is present in Appendix A of this document. Table 2.7.2 does not include changes to several main roads on the District and the status of these roads does not change by alternative. Table 4.3.3. includes several roads that do not change by alternative but have sensitive water resources that have a high probability of access based on topography and vegetation density. These roads are Forest Road numbers 20060, 20059, 26109, 20028, 20216, 6101, 26729, 26731, 20206, 20116, 20073, 20200, and roads and trails around Pineview Reservoir. Roads that change by alternative in Table 4.3.3 are Forest Road numbers 20144, 20221, 20071, 20191, 20070, and 6090.

Table 4.3.3. Sensitive water resources that have high probability of access.

WATER FEATURE NAME	Road/Trail Access Point and Maintenance Status
CURTIS CREEK ANALYSIS AREA	
Headwaters Rock Creek east of Road 060	Forest Road 20060 - Main Arterial Route
Headwaters Curtis Creek near Guard Station	Forest Road 20060 - Main Arterial Route
Sawmill Spring	Forest Road 20060 - Main Arterial Route
Campground Spring on Admin Road	Forest Road 26109 –Admin Road
Chuckhole Spring	Forest Road 20059 - Main Arterial Route
Joanna Spring	Forest Road 20059 - Main Arterial Route
Willow Sink Spring	Forest Road 20028 - Closed Basic Custodial Care
Roundup Spring	Forest Road 20059 - Main Arterial

	Route
Six Bit Spring	Forest Road 20144-A – Open to high clearance vehicles
Red Wells	Forest Road 20059 - Main Arterial Route
Running Water Spring	Forest Road 20216 - Open
Zion Spring	Forest Road 20221-A – Gated Route
Elmo Pond	Forest Road 20221-A – Gated Route
Blind Spring	Forest Road 20059 - Main Arterial Route
MONTE CRISTO and WHEATGRASS ANALYSIS AREA	
Sugar Pine	Forest Road 6101 – Open Trail
Peggy Hollow	Forest Road 26729 – Open to high clearance vehicles
Dairy Ridge Reservoir	Forest Road 26731 – Open to high clearance vehicles
Wheeler Spring	Forest Road 20071 – Open to high clearance vehicles
Big Springs	Forest Road 20206 – Open to high clearance vehicles
Dry Bread Pond	Forest Road 20116 - Open to Passenger Cars
Lower Dry Bread Pond	Forest Road 20073 – Open to high clearance vehicles
Bullwacker Spring	Forest Road 20200 – Open to high clearance vehicles, gated
SOUTH FORK ANALYSIS AREA	
South Fork Ogden River	Forest Road 20191 - Open to Passenger Cars
OGDEN FRONT & PINEVIEW ANALYSIS AREA	
Pineview Reservoir	Several roads around reservoir - High Clearance vehicles to Paved user comfortable roads
WILLARD & PUBLIC GROVE ANALYSIS AREA	
Perry Reservoir	Forest Road 20070 – Open to high clearance vehicles
Willard Lake	Forest Road 6090 – Open Trail

An assessment is made of the effects to sensitive water resources from illegal ATV use by alternative. The effect to water resources of current illegal ATV use is the same under all alternatives and is assessed first. The potential effect of illegal ATV use is then assessed by alternative based on the travel routes that would be authorized under each alternative.

Effect of Current Illegal ATV Use on Water Resources – It is assumed that illegal ATV routes have the potential to increase in areas that are conducive to ATV use and routes with high probability of access sensitive water resources are shown in Table 1. Most of the sensitive water features are very close to roads that are main road arteries through the Forest, main secondary roads, or are administrative roads that are gated from public use. Several of the water features along the main arterial roads are fenced to keep livestock from trampling them. Illegal ATV use has had very little impact on these features as indicated by absence of ATV tracks due to fences, road gates, or proximity to higher vehicle use along main travel ways.

4.3.5.2 Effects by Alternative

Effects on Water and Aquatic Resources of Alternatives - It is expected that there is a potential for an increase in illegal ATV use that could adversely affect aquatic and water resources from rutting and sediment production from ATVs crossing spring areas, wetlands, and perennial streams. Effects are the same between alternatives for Road Numbers 20060, 20059, 20028, 20216, 6101, 26729, 26731, 20206, 20116, 20073, 20200, and roads and trails around Pineview Reservoir. Their effects on aquatic and water resources are described in this section,

Effect of Current Illegal ATV Use on Water Resources. Effects may occur differently between alternatives for Forest Road numbers 20144, 20221, 20071, 20191, 20070, and 6090. These are presented below.

Table 4.3.4. Summary of Proposed Activities by Alternative.

Road or Area Name	Road No.	Alt 1	Alt 2	Alt 3	Alt 3a	Alt 4	Alt 5
Six Bit spring	20144	New Admin	New Admin	New Admin	New Admin	Open	New Admin
Zion Springs	20221	New Admin	New Admin	New Admin	New Admin	Open	New Admin
Baldy – Wheeler before gates	20071	New Motor tr	Open	Open	Open	Open	Open
Camp Red Cliffe	20191	New Admin	New Admin	New Admin	New Admin	Open	New Admin
Perry Reservoir	20070	Admin	Open	Admin	Admin	Admin	Admin
Willard Lake	6090	Non-motor tr	Motor trail	Non-motor tr	Non-motor tr	Motor trail	Non-motor tr

Alternative 1

Alternative 1 would be the same as current conditions under Alternative 5 except a new motorized trail would be developed on Road 20071 and would not include full sized vehicle use along the road. This would likely reduce illegal full size vehicle use along the Baldy –Wheeler route.

Alternative 2

This alternative would be the same as current conditions under Alternative 5 with the exception of the conversion of a Perry Reservoir route from administrative use to an open status and conversion of the non-motorized Willard Lake trail to a motorized trail. This would increase the amount of motorized use in these two areas and has the potential to result in illegal ATV use, damage to wetland vegetation, and possible sedimentation of water that may impact aquatic organisms in Perry Reservoir and Willard Lake.

Alternative 3

Effects would be the same as Alternative 5.

Alternative 3a

Effects would be the same as Alternative 5.

Alternative 4

This alternative would vary from Alternative 5 by creating open motorized vehicle on Roads 20144, 20221, 20071, 20191, 20070, and convert non-motorized trail on route 6090 to a motorized trail. This would increase the amount of motorized use in these two areas and has the potential to result in illegal ATV use, damage to wetland vegetation, and possible sedimentation of water that may impact aquatic organisms in Six Bit spring, Zion and Elmo springs, along South Fork Ogden River, Perry Reservoir and Willard Lake.

Alternative 5

This alternative is the same as the current travel status on the Ogden Ranger District. Road numbers 20144, 20221, 20191, and 20070 are managed as administrative use, Baldy – Wheeler Road (20071) is managed as open to all vehicles, and Willard Lake Trail is managed as a non-motorized trail. Currently, there is very little illegal ATV use along these routes although there is the potential for illegal ATV use.

Add the following to section “4.4.3 Effects Analysis Methods and Assumptions” on page 4-11 in the Ogden Travel Plan FEIS.

- Unauthorized routes effects will use the inventory of features digitized from 2010 (9.84 inch) high resolution orthophotography.

Add the following to section “4.4.4 Direct and Indirect Effects” on page 4-13 in the Ogden Travel Plan FEIS.

In conclusion, there is illegal ATV use that could adversely affect aquatic and water resources from rutting and sediment production from ATVs crossing spring areas, wetlands, and perennial streams. Most of the areas where the potential increase will occur are in upland relatively flat and dry, the adverse effect to water resources are expected to be low. The continued active effort to implement the mitigation measures such as signing, education and information, and obliteration of unauthorized routes will minimize adverse effects to crossing spring areas, wetlands, and perennial streams.

4.4.4.7 Effects of Unauthorized Off-Road Vehicle Use on the Soil Resource

Erosion and sediment occur in all watersheds as a natural geologic phenomenon. Management activities associated with roads, trails, and cross-country motor vehicle use can accelerate erosion and sediment beyond the historic range of variation and geological rate (Satterlund and Adams, 1992). Most of the negative impacts to the soil resource occurs with the creation of the road or trail itself. The presence of a road commits the

soil resource to a non-productive use and where roads occupy formerly productive land, they affect site productivity (Gucinski et al., 2001).

The first consequences of pioneering a trail across a landscape are the stripping of surface vegetation, the abrasion of roots, and the compaction of surface soil layers. These impacts destroy soil structure, reduce water infiltration, and break bonds between soil particles. Soil particles become more vulnerable to displacement and loss from wind or water erosion. Soil compaction can also lead to surface subsidence; the lowering of the trail relative to the adjacent ground surface. Trails then become entrenched. The lower surface intercepts and drains water from adjacent surfaces and channels that flow along the trail. This increases the risk of water erosion on sloped areas and the pooling of water in low-lying sections. As trail surfaces degrade due to rutting, users widen the trail until the area is scarred with a number of routes in various stages of use and abandonment (Meyer, 2002). Once the trail is established impacts continue through processes such as mass wasting, surface erosion, sedimentation, and creation of pioneered routes across the landscape.

When routes are located on soils that have a high potential for erosion or compaction the negative impacts can occur with far less disturbance. Surface erosion occurs when wind or water displaces exposed trail surfaces. This usually occurs on steep terrain or on sandy soils that are susceptible to wind erosion. Surface failure occurs when trail surfaces degrade into muddy tracks with deep muck holes. This usually occurs on flat areas with organic or finely textured soils. Either pathway can lead to environmental impacts that are extremely difficult to stabilize or reverse (Meyer, 2002).

User-created travel routes tend to occur on flatter terrain at the bottom of a draw where they cannot be drained, or perpendicular to the slope where they can quickly rut and become the path of drainage. Properly designed and maintained system roads and trails have cross-drainage features such as rolling dips and water bars to minimize erosion or sediment transport. User-created roads and trails do not have these features and over time erosion increases. Generally, user-created routes have the most potential to impact the watershed processes, water quality, and riparian health.

Table 4.4.1: Miles by Alternative

Alternative	Project Area FS only (miles)	High Risk Area (miles)
Alt 1	29	18
Alt 2	40	24
Alt 3	17	11
Alt 3a	24	14
Alt 4	242	126
Alt 5	24	14

Effects of Alternatives - It is expected that there would be a potential for an increase in unauthorized routes that could adversely affect soil resources especially in areas where new routes or change in designation have been proposed from the existing designation. Miles by alternative are listed in Table 1 for new, open route designations in high risk

areas (as outlined under Analysis and Comment). Alternative 4 (existing condition) was used as the baseline for changes in route designations. Within Alternative 4 the designations of old closed, n/a, non-motor trail, non-existent, and unclassified were used in the GIS analysis to determine route changes by alternative. Changes in designation included new open, new road, and new motorized trail. Potential miles conducive to creation of new unauthorized routes are outlined in Table 1. Whether additional impacts to the soil resource are likely is stated in Table 2. The “Potential” classification for additional impacts is based on at least one Action Alternative that changed the designation from the existing condition. Action alternatives are outlined in the FEIS.

Table 4.4.2: Additional Impacts

Curtis Creek Analysis Area Road or Area Name	Road No.	Illegal routes currently exist near travel route	Topography conducive to unauthorized trail creation	Additional impacts to soil resource likely from new unauthorized trail creation	Comment
Tilda Spring 1	26001	No	No	No	--
Tilda Spring 2	26002	No	No	No	--
Tilda Spring 3	26003	No	No	No	--
Tilda Spring 3 extension	xxx4	No	No	No	--
Tilda Spring 4	26004	No	No	No	--
Tilda Spring overlook	26102	No	No	No	--
Boundary Spring ATV	26736	Yes	Yes	Potential	0.15 mile segment re-rte to protect spring. ~1 mile section reclaimed.
Boundary Spring reroute	xxx5	Yes	Yes	No	0.15 mile segment re-route to protect spring. ~1 mile section reclaimed.
Baxter Sawmill 2	26994	Yes	Yes	Potential	1.1 miles – Potential new open road
Baxter Ridge	26714	Yes	Yes	Potential	0.9 miles –Potential to be managed as new road
Davenport Hollow overlook	xxx8	Yes	Yes	No	1.12 miles – closed to motor but will be managed as non-motor
Davenport Hollow south	20196	No	Yes	Potential	1.1 miles managed as new where connects to tilde Spring 3 (xxx4)
Davenport Hollow north	20196	Yes	Yes	Potential	--
Arbs Basin	20269	Yes	Yes	Potential	--
Arbs dispersed camping	20057	Yes	Yes	No	To access dispersed site. Ends in area outside of risk analysis area.
Arbs Private	26724	Yes	Yes	Potential	--
Walton Gulch	xxx7	No	No	Potential	New

Tin Cup Spring	20210	Yes	Yes	Potential	--
Buck Spring reroute	20197	No	Yes	No	0.25 miles – realigned ~1.9 miles gated
Middle Davenport	20187	Yes	Yes	Potential	--
North Gorge Canyon	xxx3	No	No	Potential	New
Curtis private	20074	Yes	Yes	Potential	0.5 miles – cont as admin
Dry Gulch dispersed	xxx2	Yes	Yes	Potential	--
Six Bit Spring	20144	Yes	Yes	No	2.2 miles – gated admin use
Zion Spring	20221	Yes	Yes	No	0.2 miles – access to dispersed camp. 1.9 miles – gated admin use
Running Water Ridge ATV	xxx9	Yes	Yes	Potential	New
Laketown Spur 1	26717	No	No	No	Closed
Laketown Spur 2	26718	No	No	No	Closed
Spencer Basin gated	20103	Yes	Yes	Potential	Level 1 currently- bring up to Level 3 to create loop
Red spur electronic	20205	No	No	No	--
Campground Springs	20082	No	Yes	Potential	Open to use. Ends at dispersed campsite.
Curtis Ridge Tr	3309	Yes	No	Potential	New ATV trail. Existing trail?
Six Bit-Spencer ATV	xx10	No	No	Potential	New trail. Creates loop.
Big Crawford Creek 1	26704	Yes	Yes	No	1.36 miles (combined 1,2,3) – close and reclaim
Big Crawford Creek 2	26705	No	Yes	No	1.36 miles (combined 1,2,3) – close and reclaim
Big Crawford Creek 3	26706	No	Yes	No	1.36 miles (combined 1,2,3) – close and reclaim
Crawford Creek 1	26989	No	Yes	No	0.9 miles – to be reclaimed
Otter Creek private (0.45 mile)	xx36	Yes	Yes	Potential	0.45 miles - signed closed and managed for admin use
Nick Reservoir (0.9 mile)	26979	Yes	Yes	No	Managed for admin use. South end ripped and seeded.
Longhurst Spring	26980	Yes	No	No	2.7 miles – gate installed and managed for admin use
Dry Canyon	26983	Yes	Yes	No	0.5 miles – gated
Pole Hollow	26109	Yes	Yes	Potential	1.4 miles – admin use don't know if gated
Valley Ridge	xxx1	Yes	Yes	No	Low erosion hazard. Not

north					new construction
Dry Fork	20162	Yes	No	No	2.1 miles – closed and reclaimed
Bob Kiddys Hole	26707	No	No	No	--

Monte Cristo and Wheatgrass Analysis Area Road or Area Name	Road No.	Illegal routes currently exist near travel route	Topography conducive to unauthorized trail creation	Additional impacts to soil resource likely from new unauthorized trail creation	Comment
Dry Bread Upper	20107	Yes	No	Potential	--
Dry Bread Hollow ATV	6324b	No	No	No	--
Dry Mitchell ATV	xx13	No	No	No	--
Dry Bread Loop	xx11	Yes	No	Potential	New
Eli Ridge (beginning)	20202	Yes	Yes	Potential	--
Eli Ridge(end)	20202	Yes	Yes	Potential	--
Powerline Spur	26711	No	Yes	Potential	Provide access to dispersed camp
Silvia Overlook	26712	Yes	Yes	Potential	--
Monte Cristo Pit Overlook	20112	Yes	Yes	Potential	--
Powerline overlook	26019	Yes	Yes	Potential	--
Dairy Wash ATV	xx14	No	No	No	--
Harriet Spring 1	xx35	No	No	No	--
Harriet Spring 2	xx37	Yes	No	Potential	Provide access to dispersed camp
Harriet Spring 3	xx38	No	No	Potential	Provide access to dispersed camp
Blake Hollow	20198	Yes	Yes	Potential	--
Wasatch Dispersed Rec.	26733	Yes	No	Potential	Provide access to dispersed camp
Blue Bell Flat – south end	20201	No	No	No	--
Neponset cutoff	xx12	Yes	Yes	Potential	--
Middle Ridge power line trail	6317	No	Yes	Potential	Potential change from admin use to public use
Silvia Hollow trail	6314	No	Yes	Potential	Potential change in status
Neponset spring trail	6315	Yes	Yes	Potential	--
Wasatch hunting camp	20222	No	Yes	Potential	Potential change from admin use to public use
Baldy – Wheeler before gates	20071	No	No	No	--

Baldy – Wheeler behind gates	20071	Yes	Yes	Potential	--
Baldy Ridge	26708	No	No	No	--
Dairy 2	26732	No	No	No	--

South Fork Analysis Area Road or Area Name	Road No.	Illegal routes currently exist near travel route	Topography conducive to unauthorized trail creation	Additional impacts to soil resource likely from new unauthorized trail creation	Comment
Camp Red Cliffe	20191	Yes	Yes	No	1.13 miles – gated. For admin use.
Ogden Front and Pineview Analysis Area Road or Area Name	Road No.	Illegal routes currently exist near travel route	Topography conducive to unauthorized trail creation	Additional impacts to soil resource likely from new unauthorized trail creation	
Skyline Divide north	6001	Yes	No	Potential	10.5 miles – seasonally closed – signed only
Skyline Divide south	6001	Yes	No	Potential	8.5 miles – single track No seasonal closure potential
Lewis Peak trail	6041	No	No	No	--
Coldwater Peak trail	6087	No	No	No	--
City View tr (Skyline to Lewis)	6040	No	No	No	--
Willard and Public Grove Analysis Area Road or Area Name	Road No.	Illegal routes currently exist near travel route	Topography conducive to unauthorized trail creation	Additional impacts to soil resource likely from new unauthorized trail creation	
West Fork Willard Canyon	6323	Yes	Yes	Potential	Closed 2012
Box Elder Creek ATV trail	xx34	No	Yes	Potential	1.24 miles – new
Perry Reservoir	20070	Yes	Yes	Potential	Admin closed 2012
Grizzly Peak 4X4	20091	Yes	Yes	Potential	--
Willard Mountain	20084	Yes	No	No	11.8 miles – seasonal closure
Inspiration Point	6091	No	No	No	0.4 miles - new designation
Willard Lake	6090	Yes	Yes	Potential	0.8 miles – closed but new non-motor
Dock Flat to Perry Reservoir	26010	No	No	No	4.4 miles – new

Dock Flat Loop east of 20084	26010	Yes	Yes	Potential	4.4 miles – new
Dock Flat parking west of 20084	26010	No	Yes	Potential	4.4 miles – new
Pete’s Hollow trail	26022	No	No	No	--
Upper Dock Flat	xx29	Yes	Yes	Potential	0.23 miles – new designation
Devils Hole canyon ATV	xx30	No	No	Potential	1.8 miles – new
Mantua church camp	xx31	Yes	Yes	No	0.8 miles – new designation. Seasonal closure
Clay Valley	26011	No	Yes	Potential	Potential change to open status
Sink Hole Loop	26012	Yes	Yes	Potential if on FS	0.84 miles - Court action
Public grove 4X4 – west 15	20220	Yes	Yes	Potential	4.5 miles – new designation
Public grove 4X4 – east 15	20220	No	Yes	Potential	4.5 miles – new designation
Avon gravel 1	26743	No	No	No	--
Dip Hollow ATV	xx33	No	No	Potential	New-connects 27743 and 20220
Public Hollow loop 4X4 -north	20092	No	Yes	Potential	Seasonal closure
Public Hollow loop 4X4 -south	20092	No	Yes	Potential	Seasonal closure
Jensen ranch 4X4	20114	Yes	Yes	No	0.41 miles – gated and managed for admin use
Jensen spur	26018	Yes	Yes	Potential	--
Little Bear ATV	xx32	No	No	Potential	New
<p>Note: Topography conducive to ATV trail creation is 1) slopes less than 30% and 2) canopy cover is >50%.</p> <p>Note: If illegal routes exist and topography columns are No: additional impacts are assumed no. If illegal routes exist and topography columns are Yes: additional impacts are assumed Potential.</p>					

Add the following to section “4.5.3 Effects Analysis Methods and Assumptions” on page 4-14 in the Ogden Travel Plan FEIS.

- Unauthorized routes effects will use the inventory of features digitized from 2010 (9.84 inch) high resolution orthophotography.

Add the following to section “4.5.4 Direct and Indirect Effects” on page 4-14 in the Ogden Travel Plan FEIS.

4.5.4.7 Effects of Unauthorized Off-Road Vehicle Use on Vegetation

Analysis of potential habitat of USFWS R4 Sensitive Species and one Federally listed species in regard to areas that are deemed to be of high risk for illegal OHV use.

The Endangered Species Act, the Forest Service Manual and Forest Plan require that plants that are recognized by the USFWS, Forest Service and the State of Utah have special consideration when projects are planned (USDA, FS. 2013). The following plants have been documented on the Ogden Ranger District (UNHP2003, Welsh, et.al. 1993). The following table lists sensitive plant species that are known on, or have potential habitat on the Ogden Ranger District.

Table 4.5.3 TES plants with known populations or potential habitat on the Ogden Ranger District.

Scientific Name	Common Name	MidscaleVegType	Elevation (ft)
Federally Listed			
<i>Spiranthes diluvialis</i> (Threatened)	Ute Ladies's tresses	WM,WI,WA	< 7,000
Forest Service Sensitive			
<i>Angelica wheeleri</i>	Wheelers Angelica	BH, WM,WI,WA	6200-10000
<i>Corydalis caseana</i> spp. <i>brachycarpa</i>	Wasatch fitweed	SF, WM,WI,WA	6200-10000
<i>Cypripedium fasciculatum</i>	Brownie lady's slipper	SF,DF,LP	8000-9600
<i>Draba burkei</i>	Burkes draba	DF, QS, SG	8400-9700
<i>Draba maguirei</i>	Maguire's draba	DF, QS, SG	8400-9700
<i>Eriogonum loganum</i>	Logan buckwheat	PJ	4790-9000
<i>Ivesia utahensis</i>	Utah ivesia	BA	6200-10000
<i>Penstemon compactus</i>	Cache beardtongue	MM	5938-11,712
<i>Tonestus kingii</i> var. <i>Barnybiani</i> *(<i>Aster kingii</i>)	Wood Aster	BN	6000-10000

Table 4.5.3. The Midscale Veg types are as follows: SF Spruce fir, DF Douglas Fir, QS Gambel Oak, TF Tall Forb, BA Barren, SG Sage Grass, LP Lodgepole pine, PJ Pinyon juniper, MM Bigtooth Maple, WM Wet Meadow, WI Willow, WA Water.

Rare plants, by virtue, are not well published unless work has been done to conserve populations and/or the species. Habitat descriptions for R-4 Sensitive species was obtained from personal observations and several other sources;

- Welsh, S.L., N.D. Atwood, S. Goodrich and L.C. Higgins. 1993. A Utah Flora (2nd ed., revised). Brigham Young University. Provo, Utah.
- USDA, NRCS. The PLANTS database (<http://plants.usda.gov/plants>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.
- Utah Natural Heritage Program. 2013. Element Occurrence Database. Utah Division of Wildlife Resources. Salt Lake City, Utah.

Based on the above information the Midscale Vegetation types were chosen for each species to gain an understanding of rough potential habitat.

GIS assumptions:

Polygons of "High Risk areas of Illegal ATV Use" were developed using the following criteria based on previous use and knowledge where past unauthorized use has been recorded:

Vegetation - using our existing coarse vegetation cover layer areas less than 30% cover are more prone to unauthorized use.

Topography - More unauthorized routes would be expected to be created off of existing routes through flatter terrain than off existing routes on steep terrain. As a general measure, existing routes on terrain 30 percent or less would be expected to have more unauthorized routes than existing routes on terrain steeper than 30 percent.

Models were created overlapping the TES Midscale Veg types and High Risk Areas of Illegal ATV Use to obtain a rough estimate of acres of potential habitat that might be impacted by illegal OHV routes.

It is important to note that the Midscale Vegetation types are general and broad scale. Rare plants typically enjoy a specific niche within those vegetation types. It would be difficult to model precise habitat types for rare plants because, by virtue of being rare, there is not a lot known about their life history characteristics. A first level coarse filter to search for rare plants is to look at a particular habitat or vegetation type that it has historically been found in. They often inhabit niches within vegetation types that are too fine in scale to be able to map. The following table is not intended to outline specific acres of potential habitat for any given rare plant but to outline the amount of habitat, within which the niches where rare plants have been historically found.

Table 4.5.4 Acres of potential TES plant species habitat within High Risk Areas for Illegal ATV Use.

Scientific Name	Common Name	Acres of TES habitat in High Risk Areas for Illegal ATV Use
Federally Listed		
<i>Spiranthes diluvialis</i> (Threatened)	Ute Ladies's tresses	9.06
Forest Service Sensitive		
<i>Angelica wheeleri</i>	Wheelers Angelica	0.17
<i>Corydalis caseana</i> spp. <i>brachycarpa</i>	Wasatch fitweed	2,953
<i>Cypripedium fasciculatum</i>	Brownie lady's slipper	3,680
<i>Draba burkei</i>	Burkes draba	2,054
<i>Draba maguirei</i>	Maguire's draba	2,054

<i>Eriogonum loganum</i>	Logan buckwheat	373
<i>Ivesia utahensis</i>	Utah ivesia	21
<i>Penstemon compactus</i>	Cache beardtongue	11
<i>Tonestus kingii</i> var. <i>Barnebiani</i> **(<i>Aster kingii</i>)	Wood Aster	21

These plants can be negatively affected by a variety of activities, human and non-human. Human activities include impacts associated with illegal Off Highway Vehicle (OHV) use, hiking, camping, picnicking and other activities that cause people to congregate in unique areas for long durations. Animal activities, both domestic and wild, may impact populations by herbivory and/or trampling.

The Willard area, especially from Inspiration Point south to Ben Lomond is of concern. Our highest concentration of rare plants is in this area. There are two major concerns regarding the plants in this area, illegal OHV use and an increasing Mountain Goat population. Foot traffic use of the area might also be considered a concern for rare plants, but probably to a lesser extent.

These impacts are true across all alternatives. Through travel management, enforcement and regular patrols, illegal OHV routes can be discovered and shut down prior to them becoming a major impact to any TES plant species.

In conclusion, illegal ATVs use could adversely affect vegetation and TES Plant habitat primarily by removing the vegetation itself and secondarily by erosion. The continued active effort to implement the mitigation measures such as signing, education and information, and obliteration of unauthorized routes will minimize adverse effects to rare plant habitat.

Noxious Weeds

Noxious weeds are generally designated as such because they have significant negative effects (or potential) on agriculture, economics, or ecosystems, and are usually not so abundant that eradication is infeasible. Noxious designation has legal ramifications for interstate transport, nursery stock inspections, and seed certifications (USDA 2004).

Table 4.5.5. Noxious weeds that have established populations on the Ogden Ranger District.

NRCS Plant Code	Scientific Name	Common Name	Number of Infestations	Infested Acres
AECY	<i>Aegilops cylindrica</i>	jointed goatgrass	9	8.5
ARM12	<i>Arctium minus</i>	lesser burdock	297	303
CADR	<i>Cardaria draba</i>	Whitetop	19	1.5
CANU4	<i>Carduus nutans</i>	nodding plumeless thistle	70	27
CEBI2	<i>Centaurea biebersteinii</i>	Spotted knapweed	14	2.6
CEDI3	<i>Centaurea diffusa</i>	diffuse knapweed	1	0.04
CESO3	<i>Centaurea solstitialis</i>	yellow star-thistle	7	2
CIAR4	<i>Cirsium arvense</i>	Canada thistle	414	411
CIVU	<i>Cirsium vulgare</i>	bull thistle	45	98
COAR4	<i>Convolvulus arvensis</i>	field bindweed	125	111
COMA2	<i>Conium maculatum</i>	poison hemlock	11	0.5
CYOF	<i>Cynoglossum officinale</i>	Gypsyflower	488	413
ELAN	<i>Elaeagnus angustifolia</i>	Russian olive	10	49
ELRE4	<i>Elymus repens</i>	Quackgrass	12	37.3
EUES	<i>Euphorbia esula</i>	leafy spurge	35	36
EUMY2	<i>Euphorbia myrsinites</i>	myrtle spurge	6	2
HYN1	<i>Hyoscyamus niger</i>	black henbane	1	0.01
HYPE	<i>Hypericum perforatum</i>	common St. Johnswort	2	0.62
ISTI	<i>Isatis tinctoria</i>	Dyer's woad	664	1058
LELA2	<i>Lepidium latifolium</i>	broadleaved pepperweed	2	0.05
LEVU	<i>Leucanthemum vulgare</i>	oxeye daisy	12	6.31
LIDA	<i>Linaria dalmatica</i>	Dalmatian toadflax	86	50
ONAC	<i>Onopordum acanthium</i>	Scotch cottonthistle	8	0.15
PORE5	<i>Potentilla recta</i>	sulphur cinquefoil	34	12
TARA	<i>Tamarix ramosissima</i>	Saltcedar	2	0.55
THAR5	<i>Thlaspi arvense</i>	field pennycress	1	0.19
TRTE	<i>Tribulus terrestris</i>	Puncturevine	7	0.7
VEVI2	<i>Verbascum virgatum</i>	wand mullein	2	0.02
Total			2384	2631.04

The number of infestations in relation to the acres infested illustrate that we have numerous small infestations that are spread out across the district.

The above listed weeds are primarily rangeland weeds, meaning that barring full shade and full submersion in water, they will grow anywhere. The transportation of weed seeds along travel routes has the potential to increase the spread of or introduce new noxious weed populations. Transport by wind, on vehicles, clothing or animals are all mechanisms for noxious weed dispersal into new habitats. For this reason noxious weed invasions due to recreational activities and permitted uses are a primary concern of managers.

Invasive species rank #1 on a parallel priority level with Homeland Security (Per Forest Service Chief Dale Bosworth) and is in the top 4 priorities of the USFS because of their impacts and threat to our mission (USDA 2003a). Emphasis on noxious weeds has increased significantly in recent years, as more people recognize invasive species' effect on all other resource areas. In addition to the national emphasis, locally the Wasatch-Cache National Forest Revised Forest Plan (USDA 2003b) provides increased direction on noxious weed management (USDA 2004). Furthermore an Integrated Weed Management Strategy was developed on the Wasatch Cache National Forest in 2005 and a Weed Treatment EIS was completed in 2006. These documents outline the weed treatment program on the district and are intended to deal with current and potential weed infestations.

These impacts are true across all alternatives. Through travel management, enforcement and regular patrols, illegal OHV routes can be discovered and shut down prior to them becoming major vectors for noxious weed expansion

In conclusion, illegal ATVs use could adversely affect vegetation by creating potential habitat that favors noxious weeds by directly removing the native vegetation and also act as vectors for noxious weed seed transport. The continued effort in noxious weed control and the active effort to implement the mitigation measures such as signing, education and information, and obliteration of unauthorized routes will minimize adverse effects to the ecosystem.

Add the following to section “4.6.7 Effects Analysis Assumptions” on page 4-17 in the Ogden Travel Plan FEIS.

- Unauthorized routes effects will use the inventory of features digitized from 2010 (9.84 inch) high resolution orthophotography.

Add the following to section “4.6.3 Direct and Indirect Effects” on page 4-41 in the Ogden Travel Plan FEIS.

4.6.3.7 Effects of Unauthorized Off-Road Vehicle Use on Wildlife

The purpose of the wildlife section of this supplemental is to evaluate and disclose the effects of existing and potential unauthorized routes on wildlife by alternative. There are primarily two facets to analyzing these effects by alternative. First, what are the effects of currently existing unauthorized routes on wildlife? And, second where are new routes likely to occur that would likely have additional effects to wildlife by alternative?

Analyzing the effects of existing unauthorized routes on wildlife is difficult because knowledge of unauthorized routes are incomplete, new routes are regularly created and existing routes are constantly being closed. Furthermore, the effectiveness of closures varies which depends on location, topography, vegetation, and type of closure. Some unauthorized routes are more difficult to close because they originate from private property and have no access from public roads. Finally the enforcement of closures varies because of differences in enforceability wherein routes farther into the back country are

visited less frequently by law enforcement than unauthorized routes closer to populated areas. Given these limitations, we used the best information available about our existing unauthorized routes to evaluate effects to wildlife.

The use of unauthorized routes varies from route to route and from area to area, where some are used more than others. For example those that originate from private property have different use than those originating from authorized routes. Likewise, those originating in back country areas are used differently than those originating from front country areas. Finally, routes originating off of authorized roads and motorized trails are used differently than those originating from another unauthorized route.

Evaluation of areas prone to the creation of new unauthorized routes is also problematic because it is difficult to determine where new routes will occur. Our approach is to essentially evaluate the proximity of the route alternatives to areas that may be prone to new route creation and then to determine if these areas fall within important habitats. We assumed that prone areas closer to authorized roads and motorized trails would have a higher probability of having a new route develop than an area isolated from authorized roads and trails. To determine where new routes would be likely, we assumed that flatter areas (less than 30% slope) and areas where vegetation was more sparse (shrub, forb and grasslands, and tree canopy cover less than 50%), would be more likely to have new routes develop than areas with thicker vegetation and steeper slopes. We verified our predictions by overlaying known unauthorized route data over areas predicted to be prone to new route creation. We found that the majority of unauthorized routes fall within areas predicted to be prone to newly created unauthorized routes. Likewise, most of our current authorized roads also fall within these areas.

The amount of unauthorized routes does not vary by alternative. However, the use of these routes probably varies and is related to their proximity to authorized routes. We note that the known unauthorized route data is not complete. The data was created by remote sensing of aerial photography on a Geographic Information System which created the Unauthorized Travel Features (UTF) data layer. This UTF layer could then be overlaid over other spatial data and evaluated. We conducted on the ground surveys of a subset of these features to determine their accuracy in identifying unauthorized routes. Data collected in the surveys included whether these were actually routes, evaluated status (closed or not), the degree of use, and other variables.

Some routes included on that layer were not actually unauthorized routes (ex. fence lines, animal trails), some were routes but were effectively closed, and some pieces of these routes were not detected by the GIS system because the on the ground feature was hidden by tree canopy. However, this data is the best estimate of unauthorized routes that we have.

GIS was used to analyze the effects to wildlife to determine the miles of unauthorized routes by habitat types. The table below shows the approximate miles of road within each course habitat type found within the WCNF vegetation data layer. These vegetation types are general types that roughly estimate the type of vegetation present in various locations

on the forest. The miles of unauthorized routes within each forest type is not exact because of two reasons:

1. The line segments of the unauthorized route data sometimes fall within more than one vegetation type. This caused the GIS system to sometimes make small errors in the length of each segment that falls within each type.
2. The vegetation layer is only accurate as coarse habitat types and has poor resolution. There exists on the ground, instances where small patches of other types occur within the vegetation type polygons.

Two habitat types were not included because they have little effect on wildlife, water, and agricultural. The segment classified as water fell within the shoreline of Pineview reservoir, and the areas classified as agriculture occurred on private property and were therefore omitted in the table below. Neither of these segments would impact wildlife on the forest. Nevertheless this is the best estimate of the miles of routes within each type.

Table 4.6.12 Miles of Unauthorized routes by habitat type.

Habitat Type	Miles
Tall Shrub/Mountain Brush	5.16
Tall Forb	0.56
Spruce-Fir	8.66
Aspen	13.11
Aspen-Conifer	2.46
Conifer Aspen	3.89
Douglas Fir	6.81
Sage brush/grassland	42.27
Pinion-Juniper or Juniper	1.92
Gamble's Oak	3.0
Lodgepole Pine	5.85
Mahogany	0.03
Mixed Conifer	3.15

Based on the assumption that new motorized routes will open access to the inventoried Unauthorized Travel Features (UTF), a review of routes that intersect a new road, new motor trail, or a new open road was completed. The following table shows the number of UTF segments and the total sum of the miles of those UTF routes by alternative. The table below reflects the number of miles of unauthorized line features that would be accessible by alternative. Variation occurs because routes proposed by each alternative would provide more or less access to existing known unauthorized routes due to proximity.

Table 4.6.13 Number and miles of unauthorized routes that would be within access distance by alternative. Variation in the miles is due to differences in proximity to authorized routes by alternative

Alternative	Segment Count	Miles
Alternative 1	52	8.31
Alternative 2	83	11.54
Alternative 3	43	5.75
Alternative 3a	47	5.74
Alternative 4	0	0
Alternative 5	58	7.48

The comparison of miles by alternative is consistent with the theme of each alternative. More new routes were proposed on alternatives emphasizing human activities and fewer routes were proposed in areas with protected resources (wildlife, roadless areas). Routes not authorized under the alternatives would be posted closed upon discovery and would receive physical barrier installation when possible and when funding was available.

Here I disclose the direct and indirect effects to wildlife from unauthorized routes and where appropriate, discuss potential for effects from areas where new routes may be more likely, especially where these areas intersect sensitive wildlife areas.

Measurement indicators used to evaluate effects of unauthorized routes on wildlife habitat are:

- Miles of unauthorized routes within key habitats.
- Acres of disturbed land within select species quality habitat.
- Road density, including authorized motorized and unauthorized routes.
- Changes to patch size for select species habitat due to both unauthorized and authorized routes.

Not all of these indicators are relevant to all species because of scale, behavior or other factors. For example, patch size is important to elk, which exhibit avoidance behavior away from roads, but may not be important to small mammals because of the scale of habitat used is much smaller than elk. Therefore the effects of reduced patch size are much greater on elk than on small mammals. In the analysis below, I evaluate the above indicators where applicable by species relative to unauthorized routes.

Motorized activities and routes disrupt the connectivity of the regional wildlife corridor described in the Forest Plan. Measurement indicators used to compare alternatives related to the regional wildlife (lynx, wolverine, grey wolf) corridor are:

- Miles of roads and motorized trails within Curtis Creek, Monte Cristo and Causey areas.
- Road density, including motorized trail density in the same areas.

The analysis will focus on species determined to be affected by authorized routes from the preferred alternative from the original Ogden Travel Plan EIS. The miles of unauthorized routes for each species should be considered to be additional to the preferred alternative (See original EIS for miles of authorized motorized routes). The analysis will consider Management Indicator Species (MIS), Regional Forester's Sensitive Species, Species Federally listed under the Endangered Species Act, and species of economic value or those that are of high interest to the public. The table below shows species considered in the Ogden Travel Plan EIS and the determination of effects from the preferred alternative. In this supplemental, we will only consider those species that were determined in the original EIS to experience effects under the preferred alternative. Additional effects from unauthorized routes and potential effect from routes that may develop in the future will be evaluated for each of the considered species.

Table 1.6.14 Determinations of effect of the preferred alternative in the original EIS. Species where effects were expected from the preferred alternative will be evaluated further in regard to unauthorized routes.

Species	Determination on preferred alternative	Considered
Mule Deer	Moderate to high effects depending on alternative	Yes
Elk	moderate effects	Yes
Mountain Goats	Effects mitigated through seasonal closures	Yes
Moose	No substantial change in population with any of the alternatives	No
Small Mammals	Not significant	No
Wolves	effects to the wolf will be related to the effects on their prey species such as deer and elk and from road densities	Yes
Goshawk	Moderate effects on goshawk and their habitat compared to the other alternatives.	Yes
Snowshoe Hare	There is no significant difference between alternatives on snowshoe hare habitat or their populations.	No
Beaver	Effects of the alternatives will not influence the trend in beavers. No substantial change in beaver population numbers is expected with implementation of any of the alternatives.	No
Lynx	moderate compared to all alternatives	Yes
Bald Eagle	No significant changes from the existing condition. All alternatives will have the same effect. Existing activities may affect individuals, but is not likely to adversely affect the bald eagle population.	No
Black Footed Ferret	Species will not be affected by any of the alternatives.	No
Yellow-billed Cuckoo	There are no significant changes from the existing condition. All alternatives will have the same affect to Yellow-billed Cuckoos and their habitat.	No

Ogden Rocky Mountain Snail	species will not be affected by any of the alternatives	No
Peregrine Falcon	None of the alternatives will affect existing peregrine falcon nesting sites. Preferred alternative may reduce motorized effects to potential habitat for the peregrine falcon	No
Boreal Owl	The effects of any of the alternatives will be negligible on boreal owl habitat or populations.	No
Great Grey Owl	The effects of any of the alternatives will be negligible	No
Wolverine	Preferred alternative would have a moderate effect on wolverine and their habitat as compared to other alternatives.	Yes
Townsend's Big-Eared Bats	The effects to foraging habitat would be minor. It is unlikely any of the alternatives would influence bat numbers.	No
Flammulated Owls	disturbance may reduce reproductive success in the Box Elder Creek motorized trail area but will not eliminate use	Yes
Three-toed woodpeckers	Will not likely be affected by implementation of any of the alternatives.	No
Sharp-tailed Grouse	Preferred alternative would have the least effect during the strutting period for sharp-tailed grouse.	Yes
Greater Sage Grouse	Implementation of the seasonal closures, this alternative is comparable to alternatives 1, 3, and 4, with fewer effects.	Yes
Pygmy rabbit	species will not be affected by any of the alternatives	No
Brewer's Sparrow	Moderate effects on Brewer's sparrows and their habitat as compared to other alternatives.	Yes
Broad-tailed Humming bird	The effects to foraging habitat, mainly in riparian habitat areas, will be minor and not be significant. The effects of any of the alternatives will not likely influence Broad-tailed Hummingbird numbers.	No
Virginia's Warbler	Road construction and trail and off-road vehicle use as likely detrimental effects to Virginia's warbler, although the effects have not been studied.	Yes
Gray catbird	This species is not likely to be affected by any of the alternatives.	No
Williamson's Sapsucker	This species is not likely to be affected by any of the alternatives.	No
black -throated gray Warbler	Alternatives with fewer miles of road and motorized trail within the juniper vegetation type will likely have less effect to the black-throated gray warbler.	Yes

Fringed myotis	The effects to foraging habitat for bat species, mainly in riparian habitat areas, would be minor. Similar to effects to the Townsend's big-eared bat, it is unlikely any of the alternatives would affect fringed myotis numbers.	No
American Marten	The alternatives with fewer miles of road and motorized trail within the conifer vegetation types may have less effect on marten habitat, especially within the Curtis analysis area	Yes

Add the following to section "4.3.3.1 Effects on General Wildlife" on page 4-18 in the Ogden Travel Plan FEIS.

Mule Deer

All unauthorized routes occur within deer habitat of some type, the most important of which occurs with mule deer critical and high value winter habitats. These winter habitats are important because they are the limiting factor for mule deer populations in Northern Utah, and because when deer use these habitats they may be low on fat reserves needed for survival. Therefore a flight response in late winter due to a vehicle uses needed energy reserves. However, the effects of roads and motorized trails within key winter range habitat are limited, since weather conditions usually preclude use by motorized vehicles. The tables below show the miles of unauthorized routes by winter habitat type and by analysis area.

Table 4.6.15 The miles of unauthorized routes in high and crucial value deer winter habitat.

Mule Deer habitat Type	Miles
Winter, High	8.4
Winter, Crucial	2.8
total	11.2

Table 4.2.16 The miles of unauthorized routes in crucial winter habitats by analysis areas.

Analysis Area	Miles
Ogden Front	0.49
South Fork	0.13
Willard	1.9
Monte Cristo	0
Curtis	0.324
total	2.844

Table 4.6.13 The miles of unauthorized routes in high value winter habitat for deer.

Analysis Area	Miles
South Fork	0
Ogden	0.12
Willard	6.71
Monte Cristo	0
Curtis	1.6
Total	8.43

Summer habitat is not as important to deer survival because it is more abundant and available during the time of year where food resources are abundant. Wisdom, et al (2004) found that recreational activities have little difference in the measurable response during ATV, mountain biking, horse riding, and hiking activities. They determined that 6% to 11% of deer responded in a flight response within 100 meters of ATV, mountain bike, horse, or hiking activity. They note that deer may respond differently to disturbance than elk, by seeking dense vegetative cover rather than actually running from the disturbance activity. If mule deer spend more time in dense cover in reaction to a disturbance activity, it could reduce foraging activity, thus affecting the ability of the animal to put on fat reserves needed for winter survival. Given the use of most of these unauthorized routes, this type of effect is unlikely to cause this type of impact.

There are approximately 87 miles of unauthorized routes in mule deer summer habitats. Deer numbers on the Ogden Ranger District are controlled by the amount and quality of winter habitat. Effects from unauthorized routes in summer habitat are minor.

There are approximately 28,934 acres of deer habitat that may be prone to the creation of new routes across the Ogden Ranger District, the majority of which fall within deer summer habitat. Not all of these prone areas will develop new routes because, often, newly created routes are pushed to get to landscape features such as ridgelines (or other viewpoints) or water sources. Efforts will continue, as always, to close unauthorized routes.

Acreage of areas that may be prone to new unauthorized routes in deer winter habitat is approximately 5362 acres. Most of these acres occur in the Willard and South fork analysis areas. Only the Willard area has routes within the prone areas which totals approximately 3298 acres and occurs mostly within the public grove areas where seasonal restrictions are in place. Seasonal closures prevent effects in these areas.

Alternatives designed to allow more human use would have greater effects than alternatives that favor wildlife or Roadless areas. When more authorized routes are available, the number of unauthorized routes available to visitors also increases. We found through our surveys that use of unauthorized routes varies and in general these routes are used less than authorized routes. Furthermore, more than half (60%) of these routes are effectively closed by single point closures. Forest Service staff has attempted to close most access points originating from authorized routes, even though the

effectiveness of these closures vary. Because of these factors, effects to deer from unauthorized routes are less than what occurs from authorized routes. Unauthorized routes that originate from private property, and do not connect to authorized routes, do not tend to receive closure efforts. Nevertheless these routes do not receive as much use either.

Times of the year when unauthorized routes likely receive the most use, and thus have the most effect, is during hunting season when people are seeking out big game. In these cases, the duration of intense use of these routes lasts for a few weeks during the rifle deer and elk hunts, and mostly on the weekends. During these times the effects from unauthorized routes are more intense but are short lived. Because hunters are mostly pursuing males, the effects to male mule deer are high. However this male mortality is compensatory (i.e. harvesting excess animals) and population growth is unaffected because enough males survive to be able to adequately fertilize females for next year's fawns. The effects of the use of unauthorized routes on females are relatively minor during these times because they are temporarily displaced into other available habitats. The main effects of unauthorized routes occur when these routes are located within winter habitats. However use of these routes during the winter is uncommon because deep snow and seasonal closures prevent the majority of use during the winter. The effects from these routes are therefore slight to moderate on mule deer under the preferred alternative (alternative 5) and are moderate compared to other alternatives.

Elk

Elk are sensitive to the presence of motorized vehicles, and exhibit avoidance of used roads by up to 1000 m. However, they will use closed roads as travel corridors if they are not used by motorized vehicles. Therefore the effects of unauthorized routes depend heavily on the amount of use they receive. The miles of known unauthorized routes within the Ogden Ranger District are shown in the tables below. These are broken out into their seasonal importance to elk.

Table 4.6.18 Miles of unauthorized routes in High and crucial value habitats in Elk winter habitat.

Unauthorized Routes in Elk winter range	Miles
High	11.43
Crucial	2.74

Table 4.6.14 The miles of unauthorized routes in crucial elk winter habitat by analysis area.

Analysis Area	Miles
South fork	0
Ogden	0.49
Willard	1.8
Monte Cristo	0
Curtis	0.447
Total	2.737

Table 4.6.20 The miles of unauthorized routes in high value winter habitat by analysis area.

Analysis Area	Miles
Curtis	2.98
Monte Cristo	0.22
Ogden Front	0.774
Willard	7.95
South Fork	0.268
Total	12.2

Table 5 The miles of unauthorized routes in high value summer habitat for elk by analysis area.

Analysis Area	Miles
Curtis creek	54.12
Monte	15.1
Willard	14.7
South Fork	1.16
Ogden	0
Total	85.08

The tables show that most of the unauthorized routes occur within summer habitats (approx. 85 miles). Only 2.74 miles occur in critical winter habitats and 12.2 miles occur within high value winter habitat for elk. Those that occur within the winter habitat mostly occur within the Willard area in Public Grove. Public grove and Willard are closed during the winter so the effects to elk winter habitats are mostly minor.

The figures below show the patch sizes under the preferred alternative (figure 1) and the reduction of patch sizes due to the presence of unauthorized routes (figure 2). Table 12 shows the reduction in acreage of patch size. Most of the reduction occurs within the Curtis, Willard, and Monte analysis areas. Although the Willard area does have elk use seasonally, it does not support large elk herds. The areas most populated by elk are the Curtis and Monte Cristo areas. Therefore the greatest effect from reduced patch size occurs within those areas.

An additional 3620 acres of patch may be prone to additional unauthorized routes, most of which is within the Mullen's hollow patch. Most of the other prone areas are isolated away from routes. Now that we have an estimate of the unauthorized routes, we have a tool to target the most important areas for closure. These areas would be targeted and, over the long term, may include barrier construction to protect elk patch size and reduce effects on elk. Barriers and closures in these areas may include gates, felled trees, boulders, fencing, ripping and restoration, or other similar methods.

Table 6 Patch size for elk including those from authorized routes and patch size after unauthorized routes are include. The difference shown in the table is the difference in acreage between patch size after authorized and unauthorized routes are considered.

Total Patch Area Available Without the Presence of Motorized Roads	Total Acres
patch size from authorized routes only	87,355
Patch Size After Unauthorized Routes are added	63,564
Difference	23,791

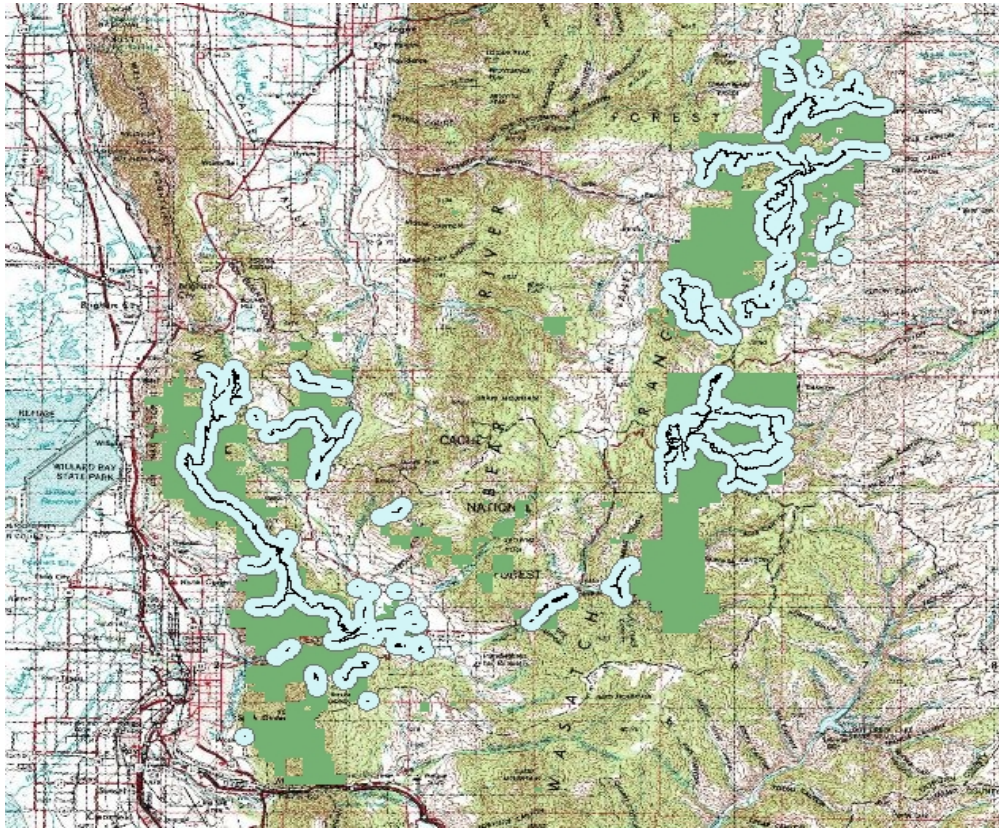


Figure 4.6.3 Patch size for elk under the preferred alternative. Patches are in green, 1/2 mile bUTFers around authorized motorized routes are in light blue.

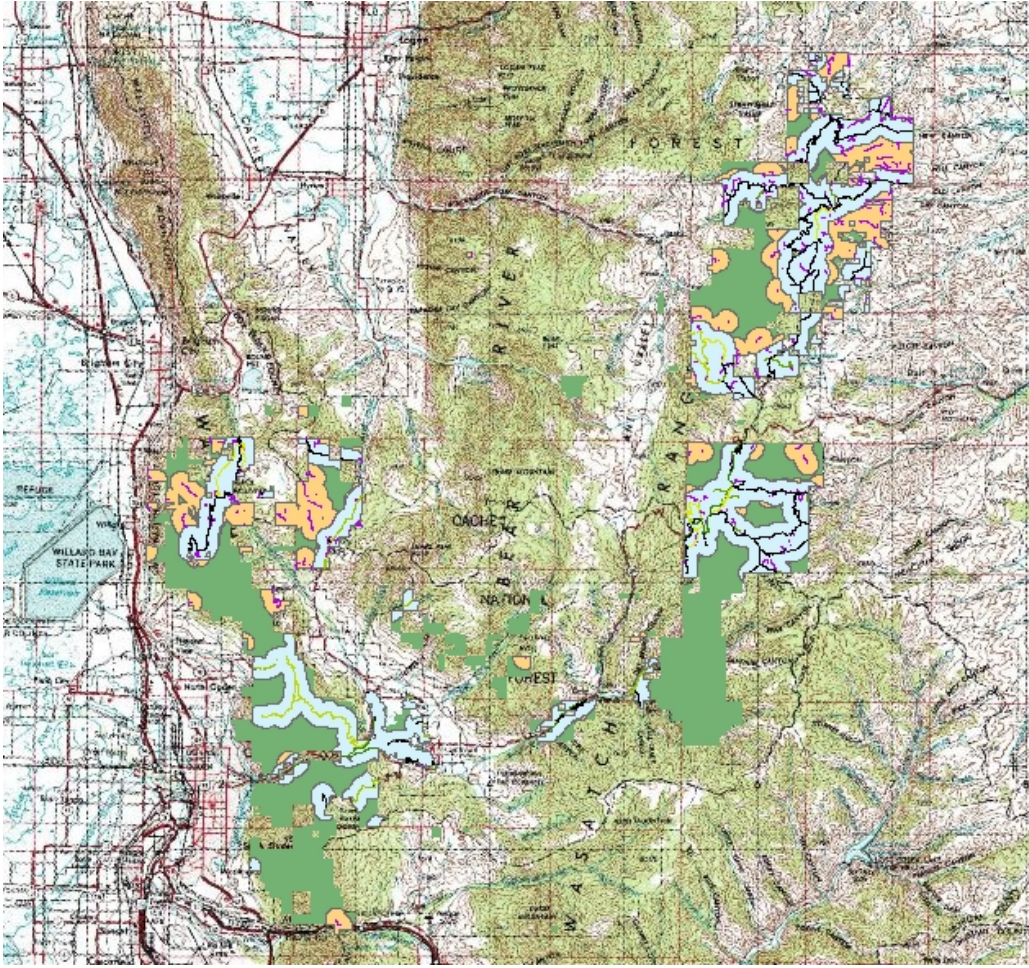


Figure 4.6.4 Patch size reduction due to unauthorized routes. Unauthorized route 1/2 mile bUTfers are in tan, and unauthorized routes are shown in purple. Authorized routes are shown in black and 1/2 mile bUTfers are shown in light blue. Patches are in green.

Alternatives designed to allow more human use and more roads would have greater effects than alternatives that favor wildlife or Roadless areas. Increases in the number of authorized routes would result in more unauthorized routes because authorized routes provide additional access to unauthorized routes or areas prone to new route development. The main effects of unauthorized routes occur when these routes are located within summer elk habitats. Use of these routes during the winter is uncommon because deep snow and seasonal closures prevent the majority of use during the winter. We found through our surveys that the use of unauthorized routes varies and in general these routes are used less than authorized routes. Furthermore, more than half (60%) of these routes are effectively closed by single point closures. Forest Service staff has attempted to close most access points originating from authorized routes, even though the effectiveness of these closures vary. Because of these factors, effects to elk from unauthorized routes are less than what occurs from authorized routes.

Nevertheless the reduction in patch size due to unauthorized route travel is significant, and thus reduces usable space for elk. Because elk are sensitive to motorized vehicle use, they may be pushed into more remote areas whenever these routes are driven. This may

cause them to utilize forage in these areas more intensely than areas near roads. This may in turn affect aspen in these areas because aspen far away from roads may receive more grazing pressure from elk.

Times of the year when these routes likely receive the most use is during hunting seasons when people are seeking out big game. In these cases, the duration of intense use lasts for a few weeks during the rifle deer and elk hunts, and mostly on the weekends. During these times the effects from unauthorized routes are more intense but are short lived where elk are temporarily displaced from their preferred areas.

Despite these effects, elk numbers have grown considerably over the last 25 years statewide, and are above objectives set by the UDWR in the Ogden and Cache hunting units. The elk population is controlled almost entirely by hunter harvest through the issuing of cow tags. The patch size and the miles of unauthorized routes represent the worst case scenario for elk, and in reality, are likely reduced from this level because of the lower amount of use that unauthorized routes tend to get. It is also highly dependent upon which routes are used. For example, unauthorized routes which penetrate far into the patches have a more pronounced effect than those that only penetrate a short distance. Most of the unauthorized routes (90%) are shorter than 0.41 miles and the average unauthorized route length is 0.19 miles. This analysis also provides us tools to focus enforcement efforts in areas of the most important habitats (ex. Mullen's hollow patch), which may allow us to reduce the effects on elk. The effects from unauthorized routes are therefore moderate under the preferred alternative (alternative 5) and are intermediate compared to other alternatives.

Mountain Goat

As described in the original wildlife analysis of the EIS, mountain goats can be sensitive to roads. In the case of the Willard mountain goat herd, the effects from unauthorized routes are likely slight because the goats use steep rocky cliff areas not prone to routes. The main exceptions to this are unauthorized routes that travel up to the ridges above the goat habitat and those that come up from the bottom near the towns of Willard and Brigham City. In these instances goats would temporarily be displaced from habitat. These effects are mitigated through the use of seasonal closures to the authorized routes and therefore the unauthorized routes are not accessible during sensitive times.

Furthermore, these effects are tempered because there are areas away from unauthorized routes that goats can use as alternative habitats. Therefore the effects of unauthorized routes are likely negligible on goats under the preferred alternative. Other alternatives, which include more authorized roads, and thus more access to unauthorized routes, would have greater effects on mountain goats. The preferred alternative is intermediate compared to other alternatives.

Add the following to section “4.6.3.3. Effects on Federally Listed Threatened, Endangered, Proposed, and Candidate Species” on page 4-30 of the Ogden Travel Plan FEIS

Lynx

Lynx are not considered residents of the Ogden Ranger District and the occurrence of lynx within the District results primarily from lynx dispersing from and to other areas. Therefore emphasis is placed on maintaining connectivity between populations in Colorado and Idaho. More than half (60%) of the unauthorized routes are effectively closed by single point closures. Forest Service staff has attempted to close most access points originating from authorized routes, even though the effectiveness of these closures vary. Because of these factors, effects to lynx from unauthorized routes are less than what occurs from authorized routes. Unauthorized routes are not likely a barrier to dispersal to lynx and therefore have negligible effects on the travel corridor for lynx. The effects to snowshoe hares (lynx prey) are also negligible (see Snowshoe hare analysis in the MIS Section of the Original EIS).



Figure 4.6.5 The regionally significant wildlife corridor

Greater Sage Grouse

Sage grouse were found to be warranted for listing under the Endangered Species Act, but were precluded due to higher priority species. Therefore the greater sage grouse was declared a candidate species under the Endangered Species Act. The sage grouse is also a Regional Forester's Forest Sensitive Species. There are a variety of ways motorized roads affect sage grouse. Examples of how roads affect sage grouse include direct habitat loss, fragmentation, disturbance of lek and nest site, direct mortality from vehicle strikes, provide travel corridors to predators, provide a pathway for invasive plants, and provide access to humans. Sage grouse are a landscape scale species and need large continuous tracts of sagebrush for survival. Unfortunately factors that contribute to the unintended

creation of unauthorized routes (areas less than 30% slope and open habitats such as sage brush) also occur in sage grouse habitats. Unauthorized routes in sage brush are also the more difficult areas to close because users can simply go around any closures structures or signs.

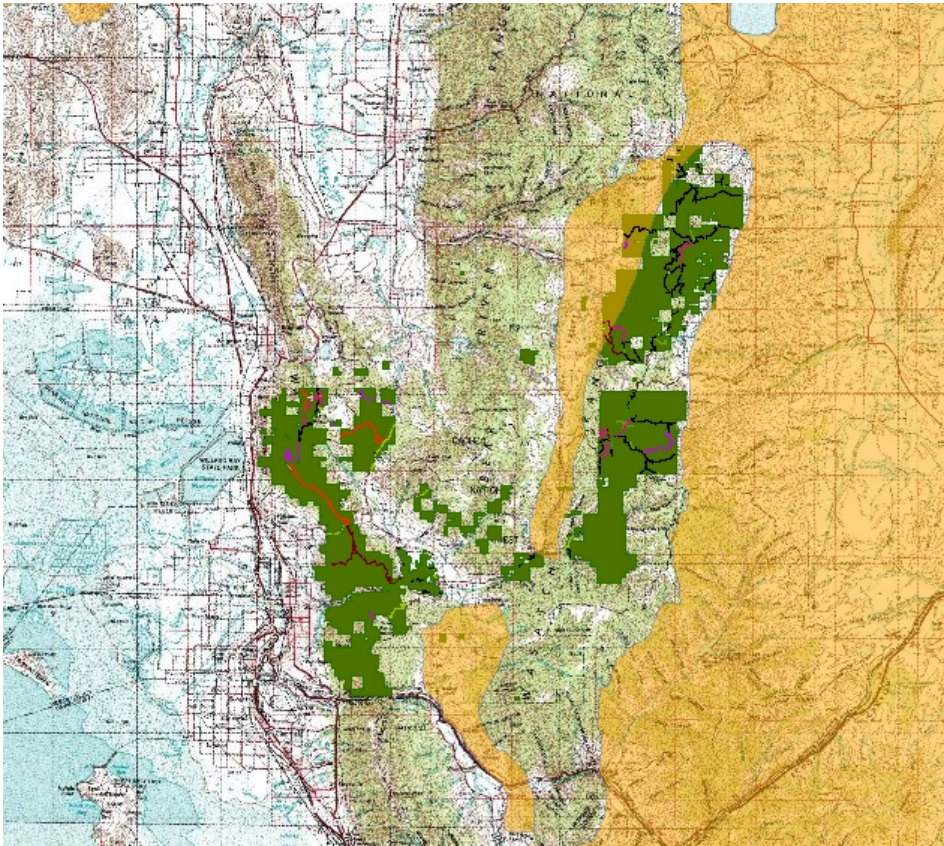


Figure 4.6.6 Sage Grouse habitat in relation to the Ogden Ranger District. Forest Lands are represented in green, and sage grouse habitats are represented in orange.

Sage grouse are known to prefer flat areas and depend on sage brush habitats. There are approximately 10,137 acres of sage grouse habitat delineated on the Ogden Ranger District (As delineated by the UDWR). The majority of the sage grouse habitat on the district occurs on the west side of the Curtis Analysis Area. Sage grouse that use forest lands mostly reside down on the Ant Flat Area, but may come up seeking moister habitats in late summer rearing their broods when lower elevation areas are dry.

The sage grouse habitat was delineated by the UDWR as a state-wide sage grouse distribution and therefore includes areas not used by sage grouse as well as areas used by sage grouse. It is likely that some of the areas on the forest delineated as sage grouse habitat are not used by sage grouse. For example conifer and other non-sage brush habitats are not used by sage grouse, but some of these habitats are included within the UDWR's sage grouse habitat area. Likewise, some areas used by sage grouse fall outside of these delineated habitats. The majority of sage grouse habitat within Northern Utah falls outside of the Ogden Ranger District boundaries. Those habitats that do occur on the district represent a small percentage of the sage grouse habitat within Northern Utah (Figure 4.6.6).

Out of the 10,137 acres of sage grouse habitats occurring on the district, approximately 1,338 acres of habitat may be susceptible to the unwanted creation of unauthorized routes. Sage grouse habitat has characteristics that are susceptible to the development of new routes, (i.e. flat ground in shrub or grassland areas). Therefore any newly developed routes within sage brush (and within delineated sage grouse habitat) would likely travel through preferred sage grouse habitats.

There are no leks within forest lands on the Ogden Ranger District. With a few exceptions, the majority of sage grouse leks around the Ogden Ranger District occur more than 4 miles from Forest lands. The closest leks are in the Ant Flat area, which are between 1 mile and 0.9 miles away. The other lek located near forest boundaries is in the eastern area of the Curtis analysis area approximately 0.5 miles from the forest boundary. Nesting habitats are usually located within 2 miles of lek locations, and therefore the Ogden Ranger District is not used much for nesting. Most of the use by sage grouse on the Ogden Ranger District is likely as brood rearing areas in late summer.

In the original EIS, the wildlife analysis found that the miles of roads varied by alternative and that the preferred alternative would include 19.54 miles of road in sage grouse habitats. Most of these roads were in use prior to the EIS decision. Some of these roads (6.21 miles) would be closed seasonally to protect wildlife or other resources, which makes some of the unauthorized routes unavailable during nesting and leking seasons. An additional 10 miles of unauthorized routes occurs within sage grouse habitats resulting in road densities of 1.87 miles/square mile. Road densities within sage grouse habitat are higher than the average densities across the district. The amount of unauthorized routes is also proportionately higher in sage grouse habitat compared to other habitat types.

We found through our surveys that use of unauthorized routes varies and in general these routes are used less than authorized routes. Furthermore, more than half (60%) of these routes are effectively closed by single point closures. Forest Service staff has attempted to close most access points originating from authorized routes, even though the effectiveness of these closures vary. Because of these factors, effects to sage grouse from unauthorized routes are less than what occurs from authorized routes. Nevertheless many of the unauthorized routes within sage grouse habitat probably are not closed effectively because of the lack of physical barriers to prevent use.

The amount of unauthorized routes does not vary by alternative. However, the use of these routes probably varies by alternative and is related to their proximity to authorized routes. Likewise, the probability of the unintended creation of new unauthorized routes probably does vary by alternative. For example, more unauthorized routes might occur when more authorized roads pass through locations with landscape features that favor new road creation, such as areas with slopes less than 30% in combination with open vegetation types (ex. grasslands). We found that the most roads travel through sagebrush/grassland habitat types. Although not all sage brush habitat types are sage grouse habitat, it appears that sagebrush habitats are disproportionately affected by unauthorized routes (table 4.6.12).

Those alternatives that provide more miles of road have more effects for sage grouse than those that have less miles of road. The preferred alternative is intermediate in the miles of roads and their proximity to known unauthorized routes. The Forest now has a data layer that can be used to identify and target unauthorized routes for closure in sage grouse habitat to reduce effects on this species. Within the context of the sage grouse habitat in Northern Utah, the percentage of sage grouse habitat affected by unauthorized routes on the Ogden Ranger District is small. Therefore the effects to sage grouse as a whole from these routes are also small. Therefore unauthorized routes may affect individuals or their habitat but will not likely lead to a trend towards federal listing or a loss of population viability. Therefore unauthorized routes may affect, but are not likely to adversely affect the sage grouse.

Add the following to section “4.6.3.4 Effects on Forest Service Intermountain Region Sensitive Species” on page 4-34 of the Ogden Travel Plan FEIS

Grey Wolf

The Ogden Ranger District occurs entirely within the Delisted Zone for Wolves in Utah. The delisted zone for wolves is generally north of I-84 and east of I-15. The grey wolf is a forest sensitive species. During the past several years, sightings of wolf-like animals have occurred in Utah. Many of these have been identified as dogs, or wolf-dog hybrids, but some individuals have been confirmed as wolves. Dispersing individual wolves are known to have periodically crossed into Utah since 2002. In 2002, a wolf from Yellowstone National Park was captured near the town of Morgan in northern Utah, southeast of Ogden. The animal was returned to Grand Teton National Park where it later rejoined its pack. To date, there has not been a breeding pair of wolves in Utah, though it is likely that dispersing wolves will again wander down into Utah in the future.

The 2010 Utah legislature passed SB 36, which directs the Utah Division of Wildlife Resources (UDWR) to prevent the establishment of a viable pack of wolves within the delisted portion of Utah. In the event that a pair of wolves is sighted, or denning behavior is observed within the delisted zone, SB 36 requires that the wolves be lethally removed by the UDWR. If a single wolf is observed in Utah, the sighting will be documented but does not require any further response from the UDWR (SB 36, 2010). The Ogden Ranger District most likely serves as a travel corridor for wolves to disperse from the Greater Yellowstone Area into other parts of Utah and Colorado (see figure 3). Despite these challenges for wolves, this document examines the effects of unauthorized routes for wolves both in how it affects the travel corridor, and their habitat.

As evaluated in the original EIS, wolves have been shown to be sensitive to road densities. Within the Rocky Mountains wolves occurred in road densities as high as 4.02 miles/ square mile, though vehicle traffic on those roads may differ from those on the Ogden Ranger District.

Road densities on the Ogden Ranger District were evaluated in the original EIS without including unauthorized routes. Here we evaluate road densities and include the unauthorized routes to disclose effects. Road densities on the Ogden Ranger District range from 0.56 miles/square mile to 1.53 miles/square mile and average 1.02

miles/square mile across the district (table 4.6.23). The most important areas for wolves on the Ogden Ranger District are likely the Monte Cristo and Curtis Creek areas because they are the habitat most likely to contain wolves. When unauthorized and authorized motorized routes are considered, road densities are 1.08/sq. mile for the Monte Cristo area, and 1.53 miles/sq. for the Curtis Creek Area. Road densities vary within each of these areas where there are large patches without roads (see section on patch size for elk, and Appendix B of the original EIS).

The effects of road densities on wolves habitat probably varies by the amount of usage roads receive, and the distribution of roads within the landscape. For example, highly used roads within preferred wolf habitat would have a larger effect than infrequently used roads, or roads within marginal habitat. Effects might also vary depending upon the average speed of travel along those roads where faster speeds would have more effects than slower speeds. More roads in wolf habitat might result in greater exposure to human caused mortality. This may be the most important factor when evaluating the ability of wolves to use the area as a wildlife corridor.

Table 4.6.23 Road density within each analysis area. The road density estimates include both authorized and unauthorized routes.

Analysis Area	Miles of road/Square Mile
Monte Cristo	1.08
Curtis Creek	1.53
Ogden	0.58
South Fork	0.56
Willard	1.32
Average	1.02

We found through our surveys that use of unauthorized routes varies and in general these routes are used less than authorized routes. Furthermore, more than half (60%) of these routes are effectively closed by single point closures. Forest Service staff has attempted to close most access points originating from authorized routes, even though the effectiveness of these closures vary. Because of these factors, effects to wolves from unauthorized routes are less than what occurs from authorized routes.

The amount of unauthorized routes does not vary by alternative. However, the use of these routes probably varies and is related to their proximity to authorized routes. Likewise, the probability of the unintended creation of new unauthorized routes probably does vary by alternative. For example, more unauthorized routes might occur when more authorized roads pass through locations with landscape features that favor new road creation, such as areas with slopes less than 30% in combination with open vegetation types (ex. grasslands).

Those alternatives that provide more miles of road have more effects for wolves than those that have less miles of road. The preferred alternative is intermediate in the miles of roads and their proximity to known unauthorized routes. However, there are large areas

without roads in the Monte Cristo and Curtis Creek are (see analysis of patch size in the analysis for elk). Unauthorized roads do not serve as barriers to dispersing wolves, except that dispersing wolves might avoid these features when in use. The strongest effects are related to effects on wolf prey, which are usually elk. Although roads have an effect on wolf prey, the elk population is above objectives and therefore likely could provide food for wolves. Therefore, unauthorized routes may affect individuals or their habitat but would not lead to a trend towards federal listing.

Northern Goshawk

The Northern Goshawk is also a Management Indicator Species (MIS) but will be addressed here as both a Forest Sensitive Species and as an MIS species. The effects of unauthorized routes depend upon their proximity to goshawk nests and how frequently they are used. To a lesser degree, there may also be effects to goshawks if unauthorized routes occur within Post Fledging Areas (PFAs). A PFA is approximately 420 acres not including the 30 acre nest area bUTFer. Combined these result in a bUTFer of approximately 450 acres around nests which is approximately a 762 meter radius around nests. The proximity to known goshawk nests are shown in the table below. I used the locations of known goshawk nests to evaluate the distances, miles of road within PFA, and miles of road within nesting areas. There are likely other goshawk nests that are not known within the Ogden Ranger District as all areas have not been surveyed. The distance from unauthorized routes ranges from 13 m up to 3545 m and averages 549 meters away. The average distance is skewed by the M territory which is much farther away than most other nests. Without this nest included, the average distance is 373 m.

Table 7 The distances (meters) of unauthorized routes from known goshawk nests.

Nest	Distance (meters)
RT A	466
RT C	516
RT B	659
OC D	945
OC C	813
OC A	56
SB A	183
SB B	20
SB C	226
DF D	133
DF B	307
DF C	652
WC A	612
M	3545
RW A	13
RW B	353
RW C	167
Wcu A	214

Average	549
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Note: The nest abbreviations may not match those in the original EIS.

The miles of unauthorized routes within the PFAs is approximately 5.8 miles, most of which lay within the Curtis analysis area. Most, if not all of these unauthorized routes originate from roads which are authorized under all alternatives. Some of them are known to be closed effectively while others have had attempts at closure with varying effectiveness. In most cases these routes see little use.

An analysis of the amount of acreage within the PFA that may be subjected to possible new routes is approximately 2907 acres. Even though these areas have characteristics that lend themselves to creation of routes, it does not mean that routes will form in these areas. Factors associated with the creation of unauthorized routes also depend whether there is a desirable place to go. For example many of our unauthorized routes travel to landscape features of interest such as springs and ponds, ridgelines, mountain peaks, etc. Not all of these areas have these features and most goshawk nests occur away from these areas of interest.

The most acute impact to goshawks would be disturbance to nests from motorized traffic. The proximity of authorized routes to unauthorized routes probably influences the amount and frequency of use of each of these unauthorized routes. A portion of the unauthorized routes are closed, and the use on these routes varies and is generally less than authorized routes. Therefore there are fewer effects from unauthorized routes than authorized routes.

We have some evidence that goshawk tolerate some disturbance from motorized travel. For example, some of our goshawk nests are very near to authorized routes, and are often successful in fledging young. They are also re-used yearly. Although there is disturbance effects on some individual goshawk nests, the presence of unauthorized routes will not likely lead to a population decline or a trend towards federal listing. They will not affect the population as a whole across the Uinta Wasatch Cache National Forest. We now have a tool to target unauthorized routes for closure. In general, alternatives that favor more routes would have more effects than those that favor fewer routes. The preferred alternative is intermediate to other alternatives in the number and mileage of new routes, thus it is also intermediate in effects from unauthorized routes because the number of authorized routes influences access to unauthorized routes. The preferred alternative may affect individuals or their habitat but will not likely lead to a trend towards federal listing or a loss of population viability.

Wolverine

This section evaluates the effects of unauthorized routes on wolverines. Sightings of wolverines are rare within Utah. They are not known to be permanent residents within the Ogden Ranger District but the area serves as a travel corridor for the species. According to published scientific studies, wolverines appear to avoid roads. Carroll, et al (2001) suggested occurrences of wolverine declined when road densities exceeded 1.7 km/km² (2.74 miles/mile²). The effects of road densities were evaluated in the original EIS but unauthorized routes were not included in that analysis. Here I evaluate road densities of authorized motorized routes and include unauthorized routes. Road densities on the Ogden Ranger District average 1.02 miles of road/square mile (table 13), which is less

than the threshold reported by Carroll et al. (2001). None of these unauthorized routes would prevent travel through the area because they are generally rough roads that generally get less use than authorized routes.

The amount of unauthorized routes does not vary by alternative. However, the use of these routes probably varies by alternative and is related to their proximity to authorized routes. Likewise, the probability of the unintended creation of new unauthorized routes probably does vary by alternative. For example, more unauthorized routes might occur when more authorized roads pass through locations with landscape features that favor new road creation, such as areas with slopes less than 30% in combination with open vegetation types (ex. grasslands).

Those alternatives that provide more miles of road have more effects for wolverines than those that have less miles of road. The preferred alternative is intermediate in the miles of roads and their proximity to known unauthorized routes. However, there are large areas without roads in the Monte Cristo and Curtis Creek area. Unauthorized routes have slight to negligible effects on wolverines passing through the area.

Flammulated Owls

In the EIS wildlife analysis the determination was that some individual flammulated owls would possibly have some effects from roads due to disturbances within areas known to have flammulated owls. I evaluated the locations of unauthorized routes in relation to known flammulated owl nesting areas. Most of the unauthorized routes in the public grove area occur outside of known nesting areas for flammulated owls. However, there are 2.5 miles of unauthorized routes in aspen habitats within the Willard and Public Grove areas that may cause some slight disturbance. These unauthorized routes are not necessarily where the flammulated owl nests are known to occur. The effects are probably intermittent and would only cause slight negative effects if any. There are likely other flammulated owl nests that have not been documented on the Forest and unauthorized routes may pass by some of these nests. The effects are probably slight overall even though some individual nests may be affected. Therefore unauthorized routes may affect individuals or their habitat but will not lead to a trend towards federal listing or a loss of population viability for flammulated owls.

Sharp-tailed Grouse

There are approximately 1.45 miles of unauthorized routes within sharp-tailed grouse habitat within the Ogden Ranger District Boundary. These routes are approximately 1.7 miles away from the nearest sharp-tailed grouse lek. Most sharp-tailed grouse nest and brood their young within 1 mile of their lek. Unauthorized routes may fragment habitats and result in a small amount of lost habitat where these routes occur. However, these lost habitats are minor within the context of their overall habitat because they represent a small percentage of the overall sharp-tailed grouse habitat. These unauthorized routes originate from one of the seasonal motorized routes and therefore are not open during nesting and leking periods. Uses of unauthorized routes within sharp-tailed grouse habitats probably do not affect sharp-tailed grouse. Therefore, the effects of these routes are minimal to no effect. The preferred alternative is intermediate in effects compared to other alternatives.

Add the following to section “4.6.3.2 Effects on Management Indicator Species” on page 4-27 of the Ogden Travel Plan FEIS

The Northern goshawk, Snowshoe hare, and Beaver are identified as Management Indicator Species for the Wasatch-Cache Planning Area. In the original EIS for the Ogden Travel Plan, the beaver and snowshoe hares were determined to have negligible effects from any of the alternatives. I also evaluated these species for effects from unauthorized routes and found that any effects to these species from unauthorized routes would also be negligible and therefore they are not addressed in this supplemental in detail. Neither species would suffer any population declines as a result of unauthorized routes on the Ogden Ranger District. Goshawks were addressed above under Forest Sensitive Species.

Add the following to section “4.6.3.5 Effects on Neotropical Migratory Birds” on page 4-39 of the Ogden Travel Plan FEIS

Three bird species were identified as receiving effects in the original EIS, the brewer's sparrow, Virginia's warbler and Black-throated grey warbler. The original EIS determined that three species would be affected when authorized routes fell within their habitats. This section of the supplemental evaluates the effects of unauthorized routes on these three species.

Brewer's Sparrow

The Brewer's sparrow is a sage brush obligate species that is fairly common in sage brush habitats statewide. However, because sage brush habitats face many threats, and because of a declining population trend in other states, the Brewer's sparrow was identified as a priority species by Partners in Flight.

Parrish, et al (2002) identified habitat loss and fragmentation (caused by roads and trails) as a concern related to the Brewer's sparrow. They also mention fragmentation is known to be a factor in increasing cowbird parasitism. Parrish, et al (2002) recommended the following for the conservation of the Brewer's sparrow with regards to road management, “Avoid road and right of-way construction in large, contiguous patches of shrub/steppe habitat. Manage large blocks of land for contiguous shrub steppe habitat and avoid activities that cause fragmentation. Re-vegetate old roads and other disturbance corridors to native grasses and shrubs.”

The alternatives with fewer miles of road and motorized trail within the grass/shrubland vegetation type will likely have less effect on the Brewer's sparrow.

Impacts from unauthorized routes result when sage brush habitats are reduced and fragmented. Reduction occurs because habitat is lost where routes develop, and fragmentation occurs when large sagebrush tracts are broken into smaller sections by unauthorized routes. The miles of unauthorized routes do not vary by alternative. However, the proximity of authorized routes to the unauthorized routes probably does

vary and may influence use of the unauthorized routes. The miles of unauthorized routes within sagebrush/grassland habitat is approximately 13.1 miles (table 4.6.12). Furthermore, the miles of routes that travel through areas prone to new unauthorized routes (flat areas that have open vegetation types), probably would influence the development of new unauthorized routes. Unfortunately, open vegetation types are more likely to develop new unauthorized routes, and they can be harder to close without physical barriers. There are approximately The alternatives with fewer miles of road and motorized trail within the grass/shrubland vegetation type will likely have fewer unauthorized routes develop, and thus have less effect on the Brewer's sparrow. The preferred alternative is intermediate in the miles of routes through the grass/shrub habitat types compared to other alternatives. Unauthorized routes will continue to be closed in Brewer's sparrow habitats.

Virginia's Warbler

Virginia's warbler habitat consists of Juniper and oak habitats. The miles of road in each habitat type was intermediate to other alternatives. The miles of unauthorized routes in oak and juniper habitat are 3.0 and 1.93 miles respectively (table 4.6.12). Comparatively, there are approximately 5,564 acres of pinion-juniper habitat and 34,837 acres of Gamble's oak habitat on the district. The development of new routes within these habitats types becomes more likely when they occur in flat areas. Virginia's warblers nest on the ground in dense thickets of brush. Areas of dense brush, especially in oak habitats are not likely to develop unauthorized routes. Rather unauthorized routes that develop within oak habitats are usually created in the spaces between oak patches. Therefore these unauthorized routes most likely would not impact nesting habitats in oak. Alternatives where more routes are authorized in juniper and oak habitats would provide users access to more areas of unauthorized routes and therefore it may result in more effects to Virginia's Warbler. The preferred alternative is intermediate in the miles of routes in both habitat types compared to other alternatives. The effect on Virginia's Warblers from the presence of unauthorized routes is slight because the area of available habitat is large compared to the acres disturbed habitat.

Black-Throated Gray Warbler

The primary habitat for the Black-throated gray warbler in Utah is Pinion-Juniper habitats. There are approximately 1.93 miles of unauthorized routes within this habitat type. The amount of pinion juniper habitat available on the Ogden Ranger District is approximately 5494 acres. The amount of habitat is large compared to the amount of habitat disturbed. Therefore, effects to the black-throated gray warbler from unauthorized routes are slight.

Add the following to section “4.6.3.6 Effects on Species at Risk” on page 4-41 of the Ogden Travel Plan FEIS

American Marten

In the original EIS, the determination of effects to American martens was as follows:

“Marten are vulnerable to the effects of trapping, which can be influenced by access provided by roads and trails. Marten trapping is not allowed on the Ogden RD. Currently, only the northeastern portion of Utah is open to marten trapping according to the 2004-2005 UDWR Furbearer Proclamation (UDWR 2004-2005). Thus, any changes in accessibility will not influence marten populations. The alternatives with fewer miles of road and motorized trail within the conifer vegetation types may have less effect on marten habitat, especially within the Curtis analysis area.”

The miles of unauthorized routes within conifer and aspen-conifer/conifer-aspen habitat types are approximately 30.8 miles. Use on these routes is less than authorized routes and likely do not have the same magnitude of effects as authorized routes. The acres of conifer habitat (mixed conifer, conifer-aspen, Lodgepole pine, Douglas fir, Spruce-fir, aspen-conifer) are approximately 47,118 acres. Therefore the effects of unauthorized routes on American martens is probably slight because there are a large amount of acres of habitat compared to the area disturbed by unauthorized routes.

Wildlife Summary

Unauthorized routes will have negative effects on a variety of wildlife, but those effects will generally be less than effects from authorized roads because of differences in use. The degree of the effects depends on the species and habitat types affected. Species affected most by unauthorized routes appear to be elk (because of smaller patch size and road avoidance behavior), and species that use sage brush-grassland habitat types (because there are more unauthorized routes in these habitats than others). In each case, these effects range from minor to moderate effects and may impact individuals or their habitats, but would not lead to a loss of viability or cause a trend towards federal listings.

Add the following to section “4.7.3 Effects Analysis Methods and Assumptions” on page 4-42 in the Ogden Travel Plan FEIS.

- Unauthorized routes effects will use the inventory of features digitized from 2010 (9.84 inch) high resolution orthophotography.

Add the following to section “4.7.4 Direct and Indirect Effects” on page 4-43 in the Ogden Travel Plan FEIS.

4.7.4.4 Effects of Unauthorized Off-Road Vehicle Use on Recreation

The analysis of the inventory of existing Unidentifiable Travel Feature (UTF) identified 1123 segments of various lengths on National Forest lands in the Ogden Ranger District. A review of this data was made to determine which were created by motorized recreation and which segments were caused by other types of activities.

Table 4.7.9 Unidentifiable Travel Feature Inventory (UTF) segments categories

UTF attribute	Total Miles	Description
Ski trail	3.41	Cleared winter trails at Snowbasin
Dispersed	6.24	Motorized travel routes used as access to dispersed camping. Less than 150 feet from the system road.
Fenceline	27.07	Feature known as an existing fence
Hiking	17.05	System trail used for non-motorized use or motorcycle only (Skyline trail)
Not a route	27.68	UTF that were not used by motorized travel or utility corridors. Often identified as cattle or wildlife trails.
Private	14.53	UTF on private property. Many were caused by motorized travel routes.
Service	7.23	Waterline, phone or power lines portion of routes or access to utility lines outside of the utility corridor or water developments
Utility	10.46	Waterline, gas, phone or power lines
Travel route	85.08	Unauthorized motorized travel routes

Of the total miles of UTF segments, 85.08 miles were categorized as clearly caused by human activities like motorized recreation. The data was reviewed by the Ranger District recreation staff with a combined history of over 30 years' experience on the Ogden Ranger District. As these segments were reviewed, it was observed that a large number of these routes have received attempts to eliminate the motorized use on them. This usually is in the form of installation of a sign prohibiting motorized use on that UTF. In some known cases, it also included the installation of a barrier to prevent motorized use. The Travel Route segments were analyzed in two methods to measure recreation related effects to the National Forest management of these recreation activities.

Recreation effects from UTF segments were considered using the following assumption. We know that during normal Travel Management activities performed by the District Staff, there are segments or routes that are easier to manage based solely on their proximity to an existing open route. When the Travel Management work crew can drive to or by the segment in question, we assumed that that route can be effectively obliterated and not allowed to be used by the public. Those segments or routes that were further away from an open route tend to be more difficult and less successful to eliminate motorized uses.

1. UTF segments identified as a Travel Route could continue to have motorized uses if they intersected with a new open road, new motorized trail, or a constructed new road. These types of new routes were identified in the EIS alternatives.

Based on the assumption that new motorized routes will open access to the inventoried Unidentifiable Travel Feature Inventory (UTF) a review of routes that intersect a new road, new motor trail, or a new open road was completed. The following table shows the number of UTF segments and the total sum of the miles of those UTF routes by alternative.

4.7.10 Miles of UTF segments adjacent to New Open Roads, New Motor trails, and New Roads

Alternative	Segment Count	Miles
Alternative 1	52	8.31
Alternative 2	83	11.54
Alternative 3	43	5.75
Alternative 3A	47	5.74
Alternative 4	0	0
Alternative 5	58	7.48

The comparison of miles by alternative is consistent with the theme of each alternative. More new routes were proposed on alternatives emphasizing human activities and fewer routes were proposed in areas with protected resources (wildlife, roadless areas).

A description of each alternative from the FEIS is included in the following table.

Since these analyses of effects to Recreation activities and recreation management use alternatives in the comparison, the following table is a summary from Chapter 2 describing the emphasis of each alternative.

4.7.11 Description each alternative from the FEIS

Alternative	Description
Alternative 1	The objective of Alternative 1 is to divert motorized use away from inventoried roadless areas in order to preserve their integrity and to minimize motorized impacts on other resources including wildlife habitat, watershed protection and public appreciation of the forest.
Alternative 2	Under Alternative 2, travel route management proposals were based on providing additional and improved motorized recreation opportunities.
Alternative 3	Alternative 3 was created in response to the numerous comments that were received during the scoping process concerning the negative effects of motorized recreation on wildlife populations and habitat.
Alternative 3A	Alternative 3a was the Forest Service preferred alternative for the Draft EIS. It is similar to Alternative 3, the wildlife emphasis alternative, but with some different actions on a limited number of routes.
Alternative 4	In Alternative 4, the No Action Alternative, the existing 2004 Wasatch-Cache National Forest Travel map for the Ogden and Logan Ranger Districts would determine the status of most of the system of routes.
Alternative 5	Alternative 5 was developed by the Forest Service after public comments on the five alternatives described in the draft environmental Impact statement had been reviewed. The purpose was to improve resolution of issues raised in public comments. Most of the actions to roads and trails of the DEIS Preferred Alternative 3a were retained.

UTF segments that are more than 0.1 mile from any type of open route, by alternative, would be more difficult to close and manage.

An analysis of UTF segments that would be more difficult to manage was done using GIS mapping software. An assumption was developed that stated that the location and proximity of the segments to an existing managed system route, which changed by alternative, would identify segments that would be more difficult to close and prevent

future motorized uses. If a segment was more than 0.1 miles away from an existing route, it was assumed that during the course of normal travel management activities, that segment may not readily receive active management efforts.

By mapping these more difficult routes, the Ranger District has a new tool to identify work projects in future years. The preliminary plan is to identify an appropriate area of National Forest with the intent to visit each of these identified segments and complete the appropriate work necessary to rehabilitate the ground. This effort has begun this season in a limited amount.

4.7.12 Miles of Difficult to Manage UTF segments by Alternative

Alternative	Curtis Creek	Monte Cristo & Wheat Grass	South Fork	Ogden Front & Pineview Reservoir	Willard & Public Grove
Alternative 1	22.94	6.41	0.89	3.76	4.97
Alternative 2	12.57	5.56	0.89	2.71	6.50
Alternative 3	15.67	5.36	0.89	2.13	6.82
Alternative 3A	13.42	5.13	0.89	1.93	7.49
Alternative 4	13.97	9.16	1.22	2.03	16.46
Alternative 5	12.81	5.74	0.75	2.71	6.36

In conclusion, the effects to motorized recreation caused by unauthorized motorized travel routes are clarified by the persons' viewpoint. Those who desire to follow the rules and regulations determined by the Land Management Agency will not ride on those routes obviously created by a rider travelling off the road. It is the duty of the Agency to remove, obliterate, discourage, or prevent unauthorized routes from so much continual use that they begin to look like an approved part of the Transportation System.

Those citizens that prefer to disregard the Land Management Agency policy of motorized travel only on "Authorized Routes", which has been the policy on the Ogden Ranger District for decades, will be affected by our continual effort to prevent this activity. The efforts in signing and closures are often criticized as showing a bias against motorized recreation. Part of the mitigation efforts needs to include information and education of why we are restoring areas and limiting motorized travel.

It is acknowledged that the efforts by the Forest Service to reduce or eliminate the environmental effects caused by unauthorized routes will need to be continued indefinitely. The ability to prevent all unauthorized travel is not possible. The priority of the Travel Management efforts by the Ranger District will be in showing an active presence either through personnel or evidence of our work to restrict travel to authorized routes only.

The mitigation and monitoring listed in Appendix D of this analysis will continue to be implemented by the Forest Service to deter unauthorized motorized uses. This will include active efforts for rehabilitation and restoration of impacted environmental resources.

The added information of the newest UTF inventory will be a valuable tool to help identify the rehabilitation and restoration work needed to be done. The effects to the environment can be determined using the inventory and effects analysis method such as done for this Travel Plan. Those areas of National Forest found to have higher concentrations of unauthorized routes will be prioritized for implementation.

Add the following to section “4.10.3 Direct and Indirect Effects” on page 4-55 in the Ogden Travel Plan FEIS.

4.10.3.2 Effects of Unauthorized Off-Road Vehicle Use on Roadless Areas

Each Inventoried Roadless Area was compared to the segments of UTF identified as a Travel Route created by unauthorized motorized recreation. The table below lists the miles of UTF within the boundaries of the roadless areas.

The number of segments is included to determine the average segment length within roadless areas. Nearly all of the Travel Routes identified in roadless are relatively short segments adjacent to approved motorized routes, ATV trails, and some from adjacent private property.

4.10.1 Miles of UTF in Roadless Areas

Name of Roadless area	Miles of UTF	Number of Segments	Average Length
Rock Creek – Green Fork	7.34	25	0.29
Mollens Hollow	7.48	42	0.18
Sugar Pine	2.88	12	0.24
Upper South Fork	0.29	3	0.1
Burch Creek	0.49	1	0.49
Lewis Peak	0.12	2	0.06
Willard	7.90	35	0.23

Add the following to section “4.14 Cumulative Effects Analysis” on page 4-55 in the Ogden Travel Plan FEIS.

4.14.12 Cumulative Effects conclusion related to the Shoshone ATV Trail

Although no alternatives propose changes to the Shoshone Trail, this decision will have direct impact to the trail.

The increase in open roads and motorized trails in the proximity of the Shoshone ATV trail vary by alternative. Alternative 5 adds nearly 8 miles of roads and trails newly open to motorized use. 4.41 miles of new open road are in the proximity of the Shoshone Trail in the Curtis Creek Analysis area. Alternative 2 has the next highest amount of newly available miles of motorized routes in close proximity to the Shoshone Trail with 6.35 miles. Alternative 1 is similar to the existing condition in the miles of road and trail open to motorized use adding only 0.26 miles above current levels.

Adding more motorized routes in the same area where there are designated Shoshone Trail segments will have the cumulative result of potentially increasing motorized use in an area already very popular with motorized users.

There will be a direct effect and a cumulative effect of increased illegal routes created by motorized users. There is usually a direct small proportional increase or decrease in user created illegal routes linked to the relative number of ATV users. If use increased because of the draw from the Shoshone ATV trail, this effect will occur.

When the concept of the Shoshone ATV Trail originated in 2002, it was introduced into the U.S. House of Representatives as H.R. 3936. As proposed, it consisted of a system of approximately 625 miles of existing roads and trails traversing both public and private land in northern Utah. Nearly the entire proposed route on public lands consisted of already designated open to motorized travel roads and trail. The bulk of this proposal was under appropriate authorities other than the US Forest Service. If this proposal was implemented, it will have the cumulative result of greatly increasing motorized use in northern Utah. For this proposal to occur, it would require each jurisdiction to approve the routes.

Since most of the routes proposed on National Forest are currently a part of the Shoshone ATV trail complex, the potential future expansion to the entire proposed system of routes would not have much meaningful impact to the National Forest. Most of the additional cumulative effect would be to private lands west of the National Forest land. The possible additional cumulative effects would be in direct proportion to the increased amount of overall ATV activity.

Normal other forest activities have a more measurable affect to public use on the Shoshone ATV trail use. During the fall hunting season, these portions of National Forest have the highest human activity of any other time of the year. The common change in normal motorized ATV recreation, by those not hunting but riding for pleasure, is because of safety concerns with high power rifles. Trips to the area just for riding ATVs for pleasure nearly disappear.

Periodically, the roads known as the Shoshone ATV trail are used for commercial hauling of timber from Federal, State and Private lands. This has an affect from safety concerns and excessive dust produced by the trucks. Signs are posted in strategic locations warning the general public about the commercial truck traffic. If the occurrence of heavy trucks is sporadic, there will not be any noticeable effect. If the commercial traffic is large and continuous, then there would be an expected change in the level of recreation use. This activity is expected to be an annual occurrence in the foreseeable future.

The other normal activity that has a temporary affect to recreation traffic on the Shoshone ATV trail is Prescribed Fire activities. The Curtis Creek Analysis area where the entire existing Shoshone trail occurs is the most active section of National Forest for prescribed fire activities on the Ogden Ranger District. The main roads are posted with signs warning the public about the fire activity and public notices are often published in local

newspapers. This usually has the cumulative result of temporarily decreasing motorized use in the area where prescribed fire activities would occur.

In conclusion, the observations of motorized recreation activities on the Shoshone ATV trail by the Ogden Ranger District personnel has continually indicated that there is not an apparent increasing trend of use caused by the naming of the routes. Obviously some of the current riders have heard of the Shoshone ATV trail or have a printed map of the routes, but probably would be riding this area because of its proximity to the Front Range. The average rider of this system or travel routes is a local resident, described as coming from the Wasatch Front communities, who know this area from friends and family hunting or playing in the mountains east of Ogden and Logan. Any increases we observe in motorized recreation are consistent with the increased population growth in Northern Utah. Every type of recreation activity has substantially increased in the last few years, including all forms of motorized recreation.

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Chapter 5 List of Preparers

Add the following citations on page 5-1 of the Ogden Travel Plan FEIS.

The following are the members of the interdisciplinary team for the Ogden Travel Plan Revision EIS.

Contributor	Education/Experience	Contribution
Michael Barry Wilderness and Trails Specialist W-C NF Supervisor's Office	B.A. Recreation, B.A. Forestry, 26 years of experience with the Forest Service	Trails and Roadless Areas
Steve Blatt Wildlife Biologist Logan/Ogden Ranger Districts	B.S. Wildlife Management, 17 years of experience in wildlife management.	Wildlife
Kevin Labrum Wildlife Biologist Ogden Ranger District	B.S., M.S., Wildlife Biology, 7 years of experience in wildlife management.	Wildlife
Jim Chard Rangeland Management Ogden Ranger District	B.S. in Range and Soil Science, 27 years of experience in range management with the Forest Service.	Range Management
Paul Chase Fisheries Biologist Logan/Ogden Ranger Districts	B.S., M.S. Fisheries and Wildlife Management, 14 years of experience as a fisheries biologist.	Aquatic Resources
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Mike Duncan North Zone Botanist, Ogden Ranger District	B.S. Botany, 14 years of experience with the Forest Service.	Botany, Sensitive Plants Noxious Weeds
Stacey Weems Soil Scientist, U-W-C NF Supervisor's Office	B.S. Geology, M.S. Soil Science. 7 years of experience with the Forest Service.	Soils
Paul Flood Soil Scientist, W-C NF Supervisor's Office	B.S. Soil Science, 25 years experience with the Forest Service.	Soils
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Robert Sanchez District Ranger Ogden Ranger District	B.S. Forest Resources 13 years of experience with the Forest Service in Hydrology and as a District Ranger.	Forest Management Leadership
Rick Vallejos Recreation Forester Ogden Ranger District	B.S. Forestry, 38 years of experience with the Forest Service in forestry, recreation, and special uses.	Team Leader, Recreation

Replace Chapter 6 with the following on page 6-1 10 in the Ogden Travel Plan FEIS.

Chapter 6 Consultation and Coordination

List of Agencies, Organizations, and Persons to Whom Paper Copies or CDs of the FEIS Were Sent

Federal Agencies

U.S. Department of Agriculture

National Agricultural Library
Natural Resource Conservation Service
USDA Animal and Plant Health Inspection Service
USDA Forest Service

U.S. Department of Defense

U.S. Army Engineer Division
U.S. Coast Guard, Environmental Impact Branch

U.S. Department of Energy (USDOE)

Office of Environmental Compliance

U.S. Department of Interior

Office of Environmental Project Review
U.S. Fish and Wildlife Service
Bureau of Land Management – Utah State Office

Environmental Protection Agency

Washington Office
Denver Office – Region VIII

American Indians

Shoshone- Bannock Tribe
Northwestern Band of Shoshone
Tribal Historic Tribal Preservation Office

United States District Court

United States District Court, District of Utah

Local Government

Utah Congressional Delegation

Congressman Rob Bishop
Senator Orrin Hatch
Senator Robert Bennett

State of Utah

Resource Development Coordinating Committee (RDCC)
Department of Natural Resources
Division of Wildlife Resources
Division of Parks and Recreation
Utah – Federal Highway Administration

County Governments

Cache County Commission
Rich County Commission
Weber County Commission
Box Elder County Commission

Libraries

Weber County Main Library
Ogden Valley Branch
North Branch
Brigham City Library
Colorado State University

Others

Many additional interested or affected individuals, businesses, and organizations received the Travel Plan Supplemental, Draft and Final Environmental Impact Statement for the Ogden Ranger District Revised Travel Plan.

Chapter 7

Literature Cited

Add the following citations on page 7-1 of the Ogden Travel Plan FEIS.

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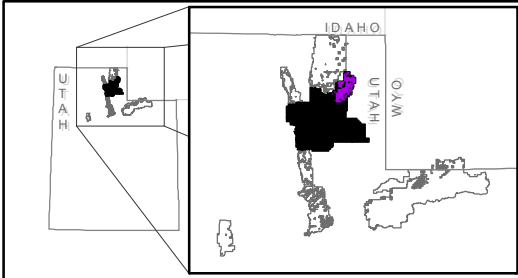
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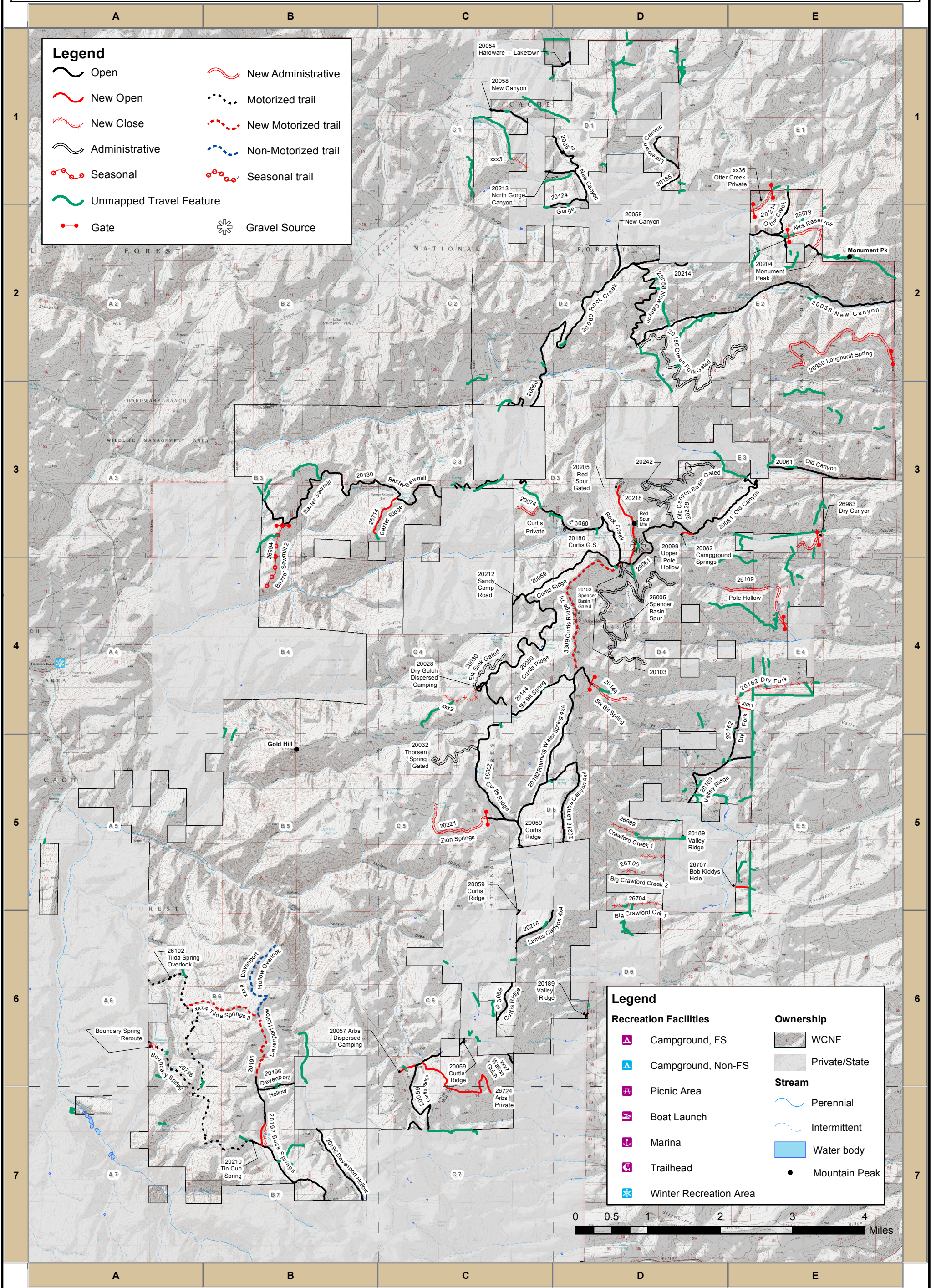
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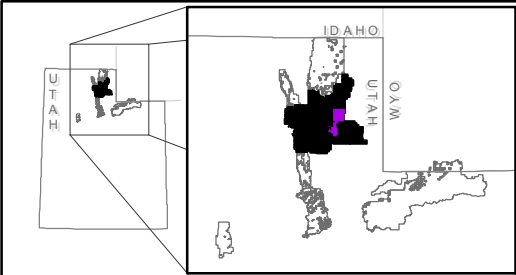
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Wasatch-Cache National Forest Ogden Ranger District Travel Plan

Revised Ogden Travel Plan Decision, March 2006
Analysis Area: Curtis Creek with UTFs

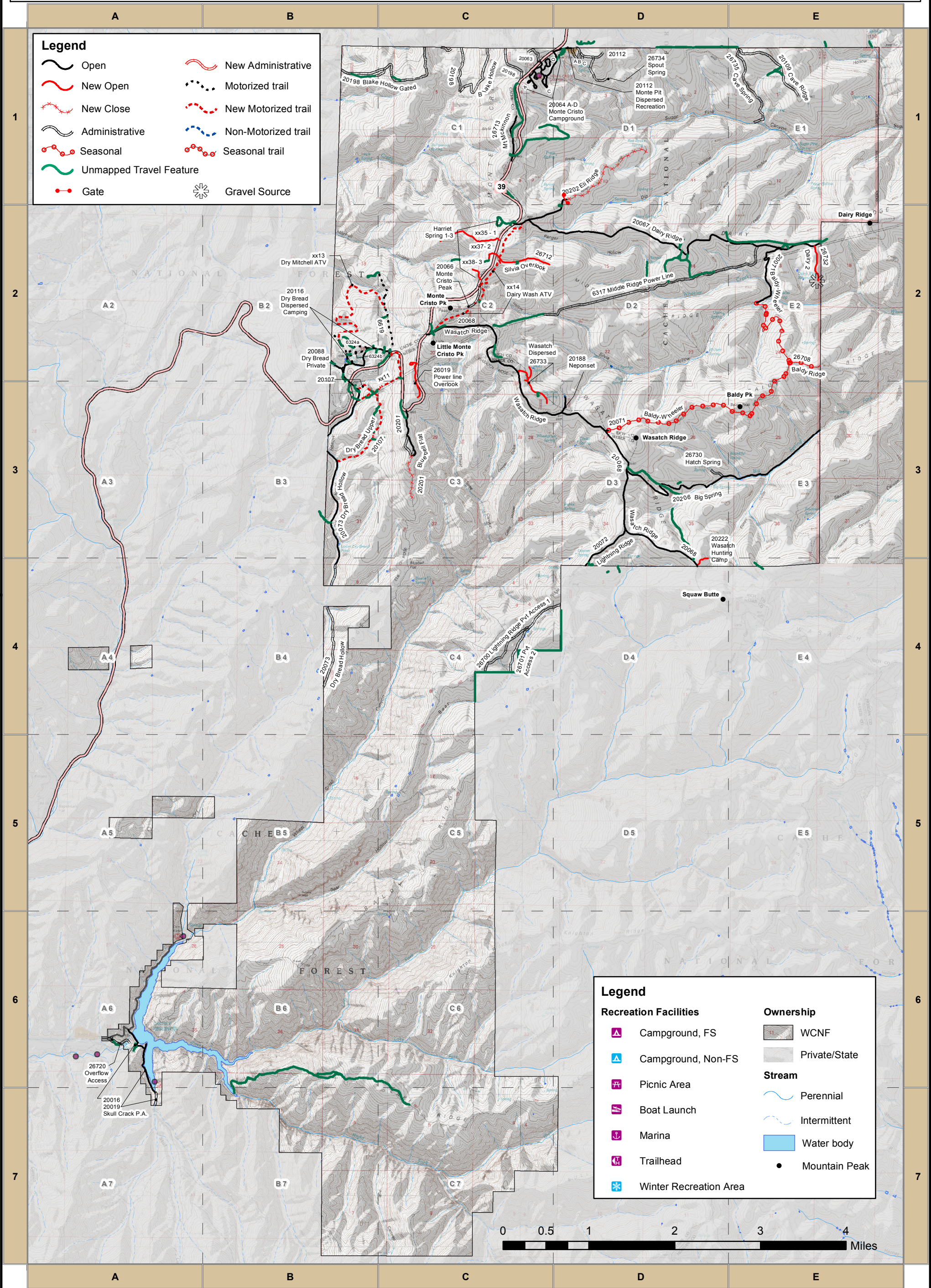


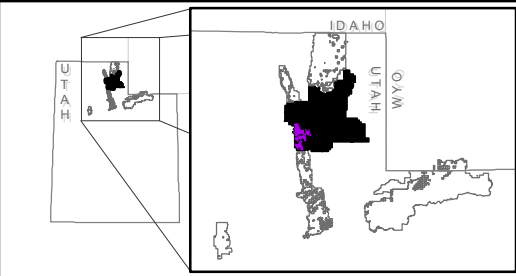


Wasatch-Cache National Forest

Ogden Ranger District Travel Plan

Revised Ogden Travel Plan Decision, March 2006
Analysis Area: Monte Cristo & Wheat Grass with UTFs



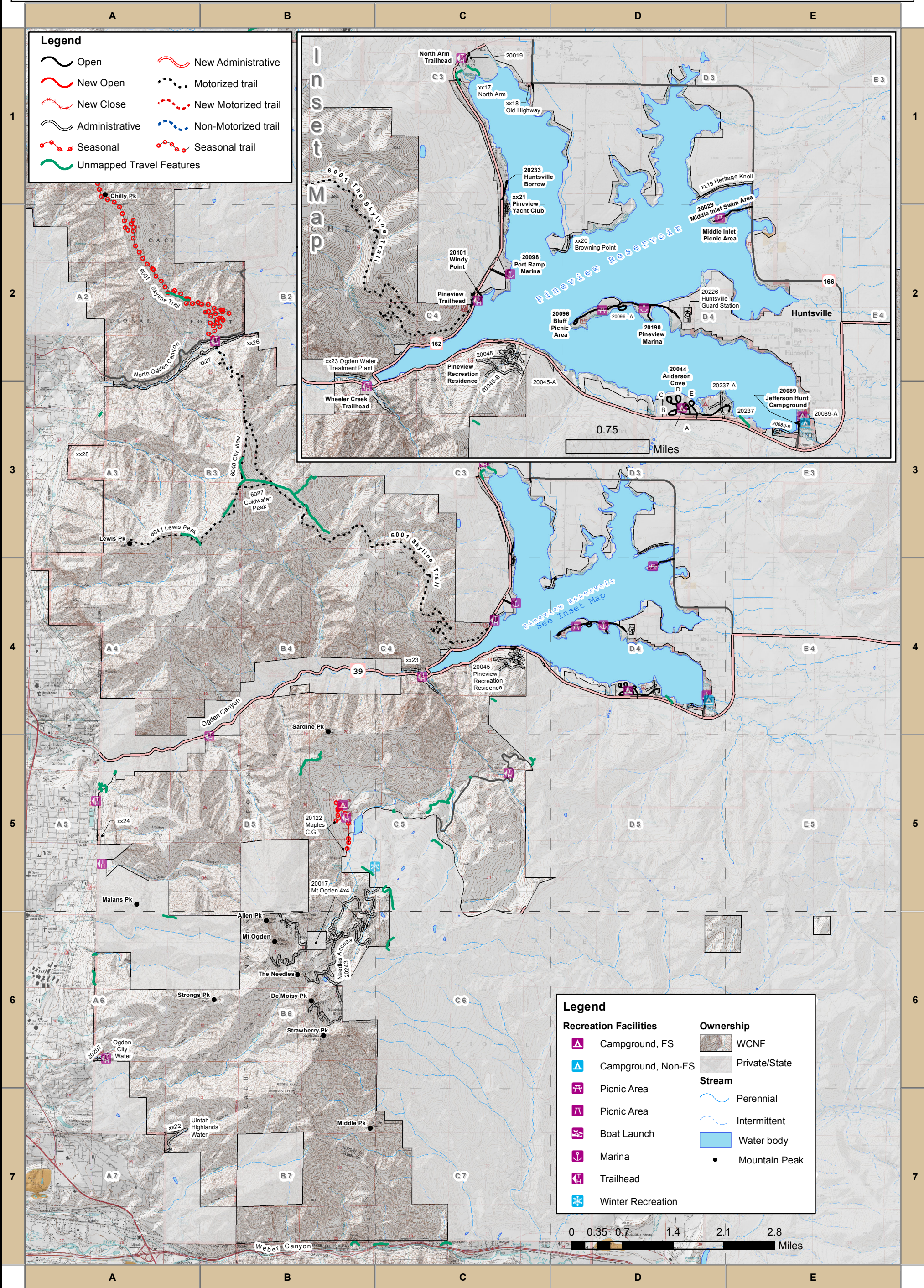


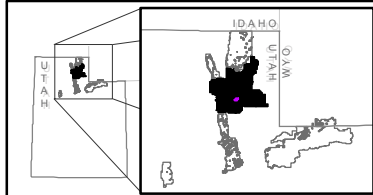
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Ogden Ranger District Travel Plan



Revised Ogden Travel Plan Decision, March 2006
Analysis Area: Ogden Front & Pineview Reservoir with UTFs



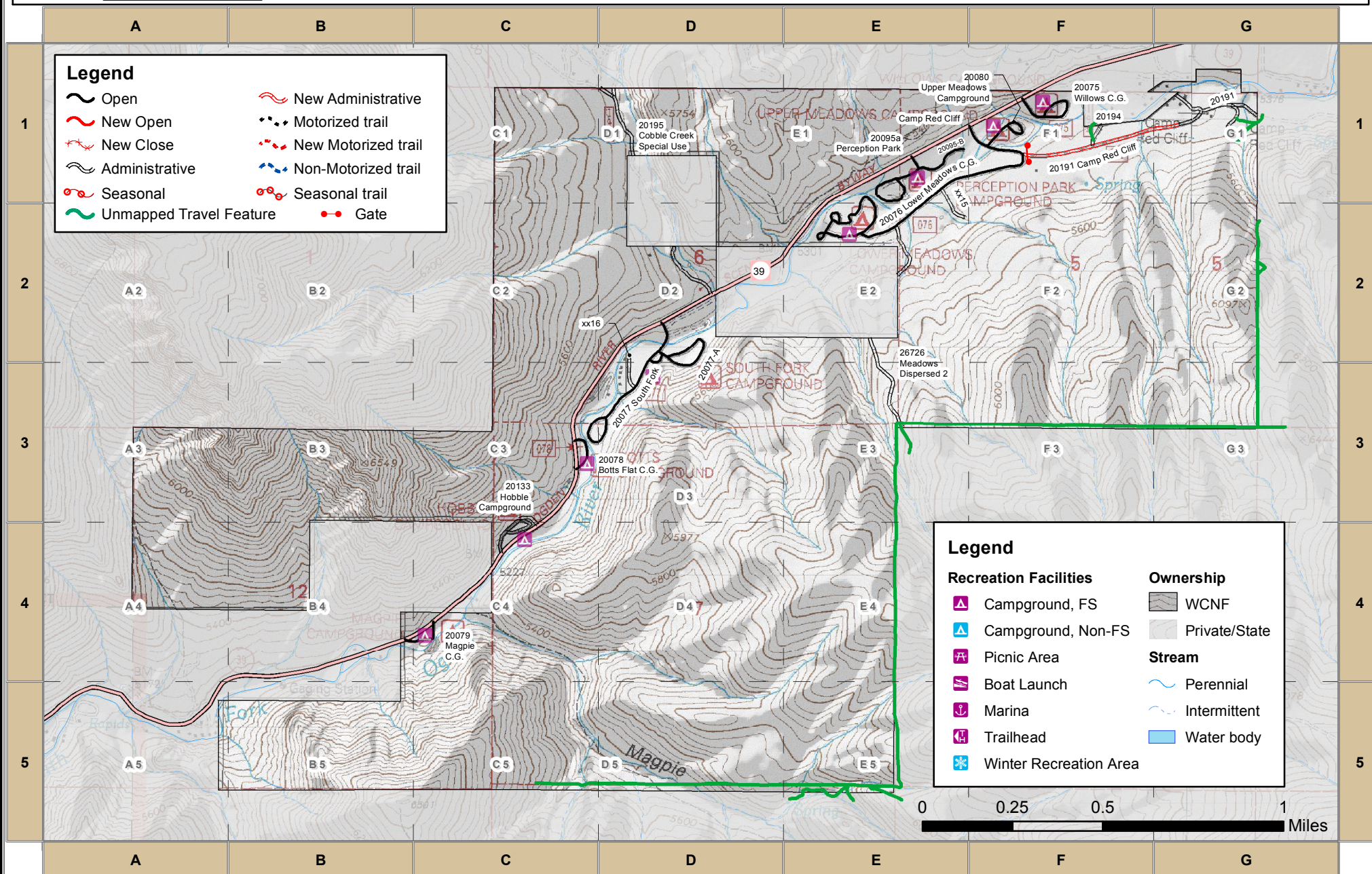


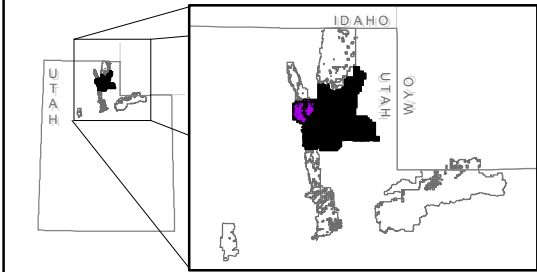
Wasatch-Cache National Forest

Ogden Ranger District Travel Plan

Revised Ogden Travel Plan Decision, March 2006

Analysis Area: South Fork with UTFs





Wasatch-Cache National Forest

Ogden Ranger District Travel Plan

Revised Ogden Travel Plan Decision, March 2006
Analysis Area: Willard & Public Grove with UTFs

